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ABSTRACT

This report is a descriptive summary of preliminary findings from the second year of research in 16 secondary schools in California and Michigan conducted by the Center for Research on the Context of Secondary Teaching (CRC). Further analyses of the data will proceed over the year and will be informed by comments of teachers, administrators, and other researchers on issues raised by general findings reported here. These findings are based on preliminary analyses of the 1990 CRC survey data and analyses of interviews conducted with teachers in each CRC high school over the two school years, 1988-89 and 1989-90. The quantitative data reported represent responses of approximately 700 secondary school teachers to questionnaire surveys conducted in spring 1989 and 1990. Qualitative data analyses are based on interviews with approximately 320 teachers. The sections of this research summary reflect CRC's core lines of analysis, which are: (1) professional community organizational patterns; (2) teachers' perspectives on today's students; (3) students perspectives on teachers and school; and (4) issues for policy. Appendixes provide information on survey measures discussed in the report and summarize survey data for each field site. (LL)

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1990 CRC REPORT TO FIELD SITES

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November 1990

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The research reported here was conducted for the Center for Research on the Context of Secondary School Teaching (CRC) with funding from the U.S. Department of Education Office of Educational Research and Improvement (Grant # G0087C0235). The ideas and findings of a number of CRC researchers contribute to this summary of Center work. In addition to the authors of the report, these individuals are: Pamela Grossman (University of Washington), Judith Warren Little (University of California, Berkeley), Steve Raudenbush (Michigan State University), Brian Rowan (Michigan State University), and Susan Stodolsky (University of Chicago). CRC Research Assistants who helped with data collection and analysis include: Nina Bascia, Mimi Beretz, Hanh Cao, Ann Locke Davidson, Marian Eaton, Michele Ennis, Stephen Fletcher, Jan Kirkhoven, Jennifer Knudsen, Rebecca Perry, Leslie Siskin, and Christina Tsai at Stanford University, Susan Threatt and Susan Sather at University of California, Berkeley, and Yuk Fai Cheong, Barbara Reinken, Kathleen Sernak and Jim Spillane at Michigan State University. A list of CRC papers and reports may be obtained from Julie Cumber, CRC Administrative Assistant, (415) 723-4972.

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EXECUTIVE SUMMARY

This report is a descriptive summary of findings from the Center's second year of research in 16 secondary schools in California and Michigan.

I. Teachers' professional community: Organizational patterns

Collegiality and faculty morale. The school, rather than the district, is the primary context for two dimensions of professional community: collegiality and morale. Teachers' scores on the collegiality index varied more between schools than between districts. Within schools, departments are a powerful source of collegiality. However, CRC independent schools have a substantially higher level of collegiality than all but one of the public schools in our sample. The high levels of collegiality reported in the independent schools and special mission public schools are supported by a few, common conditions: recruitment and retention of faculty committed to the school mission; a shared definitions of students' needs; jobs designed to serve the mission and student needs; strong professional norms and leadership enforcing teachers' job commitment.

Faculty morale also differs significantly across CRC schools. Levels of teacher morale mirror differences among sites in teachers' judgment of principal leadership. Strong leaders in the CRC schools take an active role in setting and maintaining a sense of shared norms and promoting a climate of mutual respect among adults and students. Additionally, strong leaders have established successful problem-solving structures and resources.

Professional self-efficacy. We find that differences between districts in teachers' sense of efficacy are greater than between schools in the same district. Explanations for these district-level effects on efficacy are found in the professional cultures, and in the different technical problems and constraints on practices that characterize each district.

We also find significant differences at the classroom level in teachers' sense of efficacy. These within-school differences are related primarily to such micro-policy factors as teacher and student assignments; and the presence or absence of structures and norms of collaboration.

Job variety, standardization and control. Teachers' conceptions of the "routineness" of their jobs varies little across schools. However, subject matter appears to be an important source of variation in teachers' job conceptions within schools. Math teachers are most likely to see little variation in their jobs from day to day. Policy contexts also make a difference in teachers' job conceptions within subject areas. In

particular, the California policy context appears to generate local differences. In contrast to their public school colleagues, independent school teachers report a uniform and high level of control over course content for all subject areas.

II. Teachers' perspectives on today's students.

Across all CRC sites, teachers comment on the important changes they see in today's students. Veteran teachers in public schools have experienced the most profound, troublesome and fundamental changes in the students who comprise their classrooms. Altered family patterns, demographic shifts, limited English proficiency, changed social norms and behaviors, dysfunctional behaviors and competing pressures from jobs and family responsibility are factors teachers mention as having a substantial, negative impact on students' attitudes and school performance.

Public school teachers respond to the challenges of today's students in a variety of ways. Some give up, some retreat from traditional norms and standards, some seek tougher enforcement of rules and expectations, some attempt to modify their practices to "fit" the new students, some engage in "triage", selecting a subset of students upon which to focus special efforts.

Personal, policy and organizational factors shape teachers' responses to today's students. There is a strong cohort effect on public school teachers' sense of efficacy; teachers age 40 and over show a much lower sense of perceived efficacy than do their younger colleagues. They feel ill-equipped either by their experience, background or training to meet the students' needs. College preparatory independent school teachers, who serve "traditional students", in contrast, show increased efficacy across age cohorts.

State and district curriculum and student policies constrain public school teachers' ability to innovate or tailor classwork to respond to the needs or interests of low achieving students. District busing policies limit teachers' efforts to provide extra assistance to students.

Organizational factors that have a positive influence on teachers' sense of efficacy include support for a personalized environment, the presence of strategies and structures for collective problem solving and a strong professional community. In schools with these features, developing effective responses to today's students is seen as the collective responsibility of the school staff, not individual teachers working in isolation. Site leadership is key to the development, maintenance and support of these norms and procedures.

III. Students' perspectives on school

For the most part, all students--high and low achieving--express a desire to learn and to do well in school. They want good relationships with their teachers, to be actively involved in the learning process, and to feel comfortable in their school and classroom environment.

In the classroom, students prize an orderly, emotionally safe environment. They express strong preference for classrooms where teachers treat students as individuals and exhibit care and respect toward them. Students of all achievement levels express dislike of lectures and textbook-dominated classes, prefer an active student role, and believe group work is beneficial to their learning.

Students identify features of the school environment that affect their attitudes toward school and learning--the visibility and accessibility of the principal, the level of general support they receive from teachers and staff, the perceived degree of safety, types of interactions among student groups, availability of extracurricular activities, mechanisms for student input into decisions, and the general condition of the school facility were important aspects of the school setting in the opinion of students. All students also point to the need for adults in the setting to set and enforce acceptable standards of behavior. For ESL students, the freedom to speak their native language in informal settings and the presence of at least one adult on campus with whom they could communicate was critical.

IV. Issues for policy

These findings highlight the opportunities for policy to support the efforts of administrators, teachers and students in diverse secondary school settings. These general policy issues are focused and made immediate by the troublesome finding that a significant number of teachers in public secondary schools feel unsuccessful in meeting the difficult and complex challenges presented by today's students. These teachers and their students pose a fundamental dilemma for policy: How can policy reach into the classroom to enable the success of today's teachers and their students?

The experience of the CRC sites identify strategic district, and school sites for policy and strategies that significantly enhance teachers' sense of efficacy. These conclusions also point to the importance of considering the policy "mix" for both students and teachers, and to the critical and necessary role of the district, even within the context of restructuring.

PREFACE

This report is a descriptive summary of preliminary findings from the Center's second year of research in 16 secondary schools in California and Michigan. Analyses of the data will proceed over the year and will be informed by comments of teachers, administrators and other researchers on issues raised by general findings reported here. The findings are based on preliminary analyses of the 1990 CRC survey data and analyses of interviews conducted with teachers in each CRC high school over the past two school years.

The quantitative data reported here represent responses of approximately 700 secondary school teachers to CRC questionnaire surveys conducted in spring 1989 and 1990. Qualitative data analyses are based on interviews with approximately 320 teachers. The teachers who have participated in both kinds of field research represent the full range of high school subjects and classes in 16 public and independent schools located in 7 different metropolitan areas/ districts within 2 states.

The organizational settings for CRC research represent substantial and potentially significant contrasts on state, district, sector and school variables. The two states (California and Michigan) differ substantially on extent of centralized educational controls and reform strategies (high and low, respectively). Urban districts within each state contrast on local economic resources, stability and leadership; urban and suburban districts contrast on community demographics. The urban public schools include both magnet and typical desegregated, comprehensive high schools. Finally, the independent school subsample provides a contrast on the organizational and policy conditions that distinguish public and private school settings, while spanning the range of student achievement represented among the public schools.

The sections of this research summary reflect the Center's core lines of analysis:

- o Professional Community: Organizational Patterns
- o Teachers' Perspectives on Today's Students
- o Students' Perspectives on Teachers and School
- o Issues for Policy

Appendices provide information on survey measures discussed in this report and summarize survey data for each field site.

I. Teachers' Professional Community: Organizational Patterns

A core line of analysis in the CRC concerns the ways in which various contexts of secondary school teaching -- the school, district, subject matter, department or collegial network -- generate shared professional identities and goals, job attitudes, and conceptions of teaching among teachers. The concept "professional community" refers to teachers' shared perspectives and norms concerning the teaching job and to the ongoing relationships that sustain them.¹

While educational research and reform strategies often assume that the school is the organizational context of high school teaching and locus for community among teachers, our Center's research questions this assumption.² Analyses of 1989 and 1990 CRC survey and interview data have asked what are the contexts of high school teaching that generate differences in teachers' professional communities? We do not assume that the school is the most important organizational context of teachers' professional lives and attitudes. We have considered, as well, the broader contexts of district, state and sector policy environments and the internal school contexts of subject areas/ departments and classes/ student "tracks" as organizational settings which might support particular, shared experiences and norms among teachers. The issue of meaningful organizational boundaries or units for understanding differences in teachers'

¹ While the concept of "school community" in the effective schools literature refers to productive norms -- shared high expectations for student achievement, high commitment to professional growth and collegial support for improvement, we do not assume that the substance of a professional community is productive. In a particular department, for example, a tight professional community may have evolved that includes the shared belief that only some students are capable of mastering, say, high school algebra. Our analysis assumes that professional communities may be more or less productive by external standards and more or less sustaining of teachers' job engagement and commitment.

² The 1989 CRC Report highlighted differences among schools in faculties' goal priorities and particular school climate variables -- extent of collegiality, principal leadership and personalization. We used data from our Spring, 1989 survey of teachers to compute school scores (average teacher ratings) on global climate measures. Since the school climate measures replicated national survey measures, each CRC site could be located within a national distribution of schools of important dimensions of climate.

professional worklives, norms, and practices is important to policy and practice because it concerns the strategic site for improving them.

In this section, we use graphs of CRC survey data to illustrate which organizational boundary seems most meaningful for understanding (or influencing) particular kinds of teaching conditions and attitudes. We look for organizational patterns in the data, i.e., where do differences in teachers' job experiences and perceptions show up? Are differences striking between schools in a district, for example, or between districts or both? What kinds of differences in job conceptions show up between subjects in similar school work settings that would suggest subject area boundaries of professional communities?

This summary focuses on a few specific kinds of professional experiences and attitudes which were tapped in the 1990 CRC Survey. (See Appendix 1 for wordings of questionnaire items used to construct each scale; see footnotes in text for any technical points about the findings reported for each index). These variables capture some of the important workplace conditions, job attitudes and conceptions of teaching that would describe the extent and nature of professional community within any teaching context. These variables are:

- o Collegiality (a 6-item scale that rates colleagues' willingness to help out, cooperative effort, high standards, continuing learning and congeniality);
- o Morale (a 13-item, overall job satisfaction scale that rates one's current teaching job on material and status benefits, collegial support, course and student assignments, parent support and growth opportunities);
- o Principal Leadership (a 13-item, global scale that rates the principal on setting goals and expectations, managing resources and outside pressures, understanding and supporting teachers' work, consulting and recognizing teachers);
- o Efficacy (a 6-item scale representing teachers' self-reported capacity, responsibility, and success in promoting students' academic success);
- o Professional Growth Opportunities Taken (an 11-item scale that rates the importance of a range of generally available professional growth opportunities -- such as experimenting on one's own, taking courses, attending conferences, consulting and/or collaborating with a colleague);

o Dimensions of the Teaching Job:

- * Job Variety (a 4-item scale rating the teaching job in terms of day-to-day variety vs. routineness)
- * Curricular Standardization (a 5-item scale reporting the degree to which one's course content and exams are predetermined and coordinated in the department,
- * Instructional Control (a single-item, 6-point scale of reporting the degree one controls the course content, topics and skills to be taught).

An important starting observation for a discussion of boundaries of professional community is that individuals within any of the broad organizational units under analysis differ more among themselves on any of these scales than they do, on average, between the units. For example, even when we see important differences between schools on our measure of Collegiality, the differences among teachers in any school on reported collegial relations are substantial.³ Nevertheless, where differences in average teacher reports show up between particular organizational contexts or units we infer that conditions within them systematically influence professional tendencies or norms.

Based on our analyses thus far of 1990 CRC data, we discuss which of the teacher and teaching variables appears to be influenced mainly by school, district and subject area department conditions.

Collegiality and Morale: The School as Professional Community

Our research suggests that the school is a primary context for two dimensions of professional community -- collegiality, i.e., shared standards and mutual support among teachers, and morale or shared feelings about a range of job conditions.

Collegiality. While some teachers we have interviewed discussed important collegial relations and a sense of professional community beyond their school's boundaries (professional organizations or district-level groups, for example), for most teachers the school and departments within them are the critical contexts for collegiality. Despite serious

³ In more technical terms, the variance among teachers on Collegiality and other index scores accounted for by any one context level (school, department, district and so on) is substantially less than the unexplained variance. Appendix 2 to this report shows within-school standard deviations for each index constructed with CRC survey data.

limits on teachers' time to work together in all of our sites, the extent of shared mission and supportive working relations among teachers vary substantially across CRC schools.⁴

Our 1989 CRC Report to Field Sites emphasized the qualitative differences we have found in the nature of professional goals -- which were reflected in the different goal profiles or faculty priorities for various educational goals -- and working relationships among CRC schools. For example, Sites 04 and 07 are both high on the Collegiality scale but have very different professional cultures: teachers in Site 04 are committed to, and support one another in, meeting the personal and academic needs of students with a history of alienation and failure in school; teachers in Site 07 are committed to, and support one another, in improving their subject area knowledge and pedagogical skills in working with mostly college-going students. Collegial relations and support mean very different things in these two school contexts.

This year's report considers trends in the extent of collegiality among CRC high schools. School scores on the Collegiality index from the 1989 and the 1990 CRC Survey are shown in Figure 1. The figure allows us to see stability and change on this dimension of teachers' professional community, as well as to consider possible district, state or sector patterns.

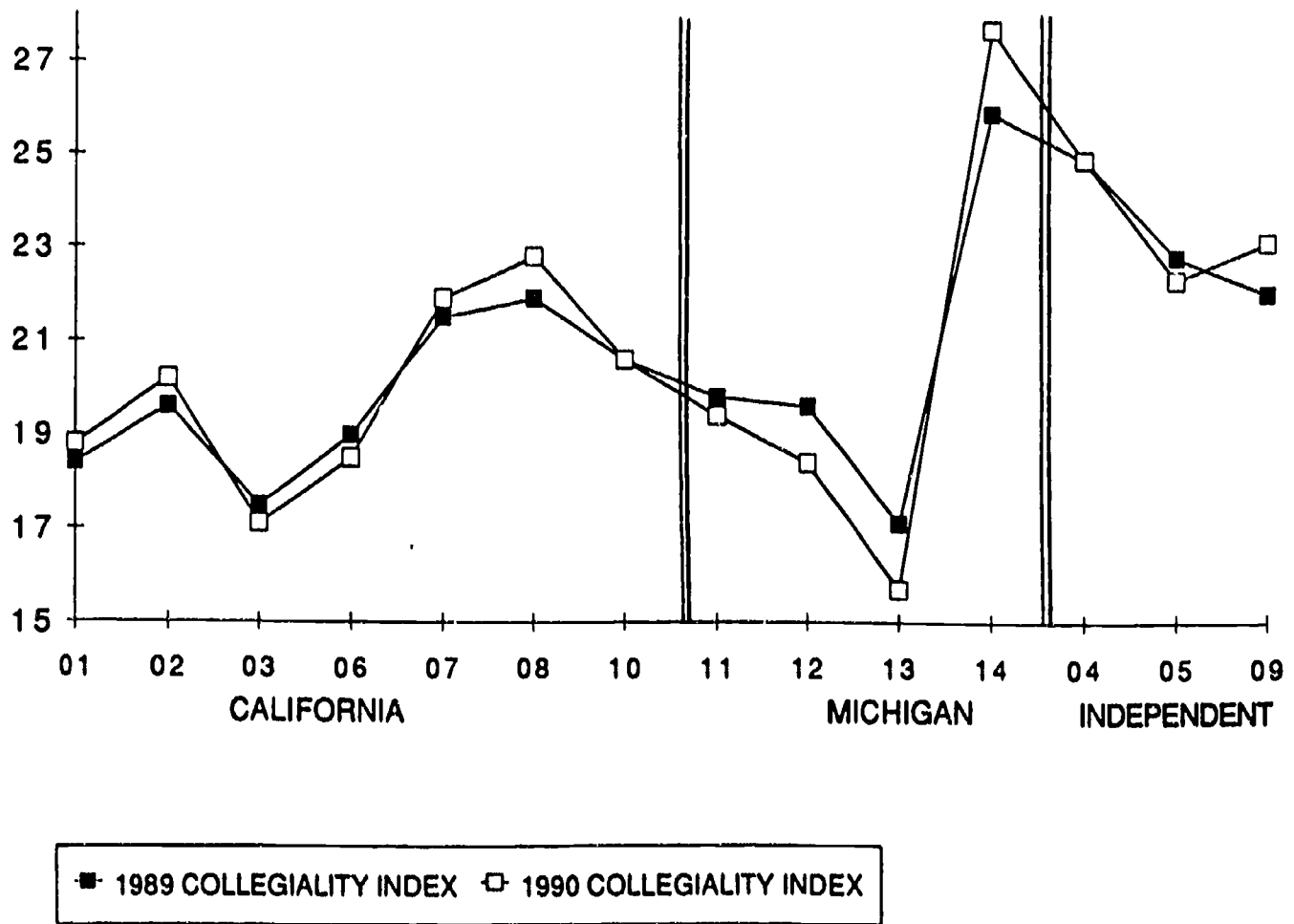
First, we see that school scores on the Collegiality index vary as much between schools in a district as between districts. That is, the school appears more important than the district context for understanding differences in teachers' experiences of shared values and collegial support. Collegiality is closely tied to the workplace and teachers' day-to-day interactions. However, differences between sectors are substantial. The CRC independent schools have higher levels of collegiality than all public schools except the Michigan alternative school (Site 14) and a California performing arts magnet school (Site 08). This pattern is consistent with that shown by the national survey data.⁵ High

⁴ While most CRC schools have average teacher ratings of Collegiality at and slightly above the mean for U.S. public schools, one school (Site 14) is nearly 3 standard deviations above the national mean and one school (Site 13) is about 1 s.d. below the mean. (See Appendix 2 for CRC site scores and scores from the HS&B ATS Survey available for some of our indices.)

⁵ The mean on Collegiality for independent schools is more than 1 standard deviation above the public school mean (see the last column of Appendix 2 table for national means and standard deviations on all replicated scales).

FIGURE 1

STABILITY AND CHANGE IN FACULTIES' COLLEGIALLY



levels of collegiality in the independent and special mission public schools are supported by a few, common conditions:

- o recruitment and retention of faculty committed to the school mission and job requirements,
- o shared definition of the students' special needs,
- o jobs designed to serve the mission and student needs,
- o strong norms and leadership enforcing teachers' job commitment.

Second, Figure 1 shows considerable stability in school measures of collegiality from year-to-year. This suggests that norms of collegiality developed in the school setting are quite stable over time and that the index is a reliable measure of differences among schools on this dimension of professional community. The organizational factors that shape collegiality, in other words, are not ephemeral; they are rooted deeply in workplace routines and values. Observed changes over one year show a trend toward increased differences among CRC schools in extent of faculty collegiality.⁶ Among the CRC public schools, 3 of the 4 schools with 1989 Collegiality scores below the national mean for public schools have lower scores in 1990; 4 of 7 with 1989 scores above the national average have higher scores in 1990. Further, the largest gains are for the schools scoring relatively high in 1989 (Sites 08 and 14), and the largest drop is for the school lowest on the scale in 1989 (Site 13).

While a third year time point is essential to establish a trend, the 2-year change patterns suggest that "the rich get richer and the poor get poorer" in terms of collegial rapport and support in the high school workplace. Our research will help to isolate conditions of both upward and downward trends in collegiality and, in particular, ways of avoiding or checking the downward spiral.

Of course, the reader should keep in mind variation in teachers' scores on the Collegiality index within each school is substantial. In fact, the standard deviation of 1990 teacher scores within CRC schools averages 4.1, while the standard deviation of school scores in the 1984 national survey was 2.3. On average, teachers within a school differ more among themselves in their perceptions/experiences of shared mission and mutual

One would expect changes in school scores on the index to move in the direction of the mean (i.e., with high scores dropping some and low scores rising some), if some of the observed 1898 school differences were due to random measurement error. The expectation of a regression of scores toward the mean makes the finding of an opposite pattern more noteworthy.

support with colleagues than do faculties between schools. In other words, while important overall institutional patterns emerge, teachers working within the same secondary school experience "school" differently in terms of collegial support and norms.

What factors underlie these differences within schools? Our research thus far suggests that some of this variation is due to different normative environments of subject area departments in typical comprehensive high schools. The department differences are idiosyncratic to schools rather than subject-determined. For example, math teachers in one site have invested considerable time revising their curriculum and instructional strategies to respond to the different needs and attitudes of students in their classrooms today. Math teachers in another site express a sense of isolation and frustration in grappling in with today's students who are less successful with their traditional mathematics curriculum. We are examining the question of what demographic, department policy and leadership variables might explain department differences in collegiality within the same school.

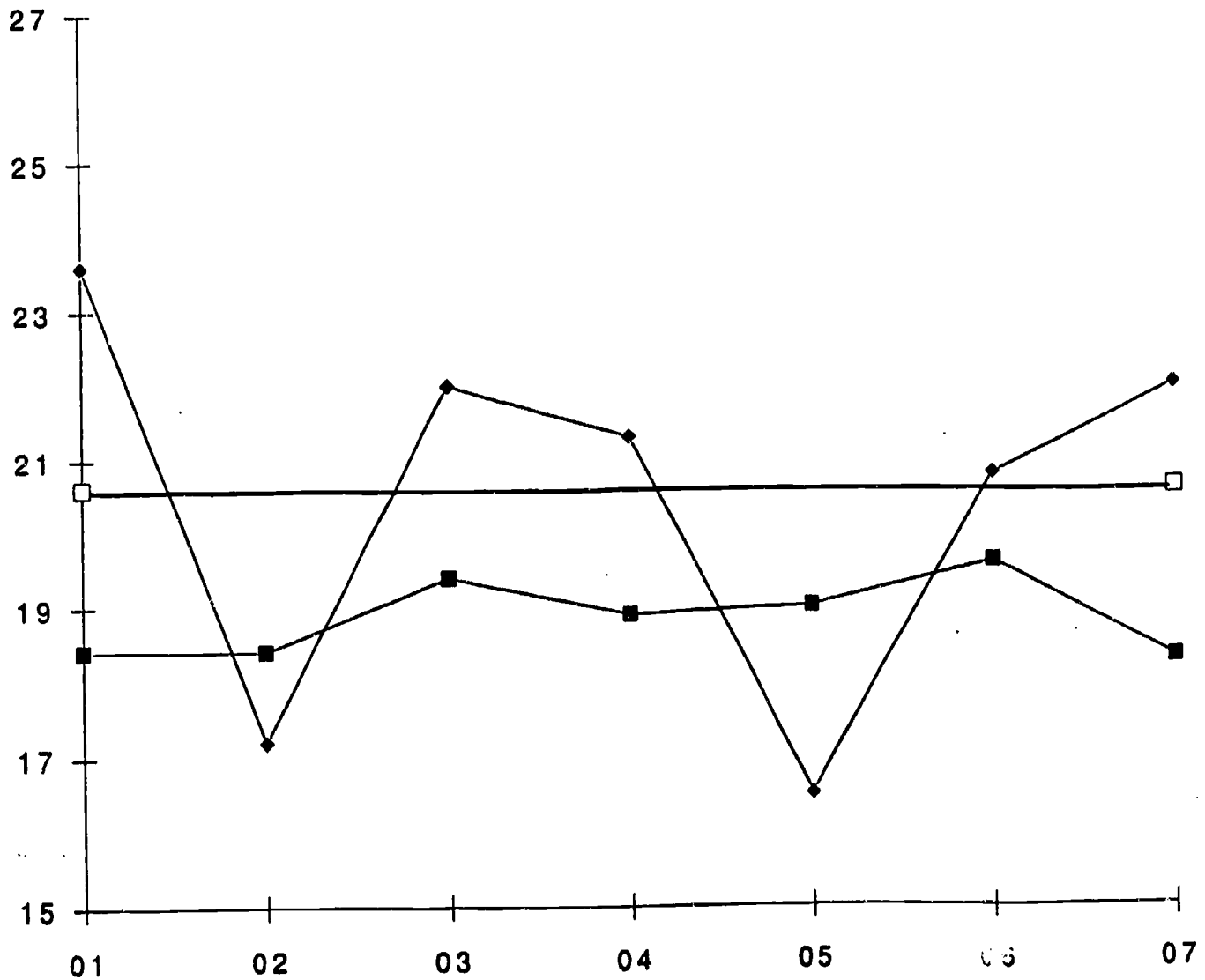
The figure on the next page provides an example of how important the subject area department can be as a context for teachers' sense of collegiality within a school. We show the comparable subject area means on this scale for a national sample of teachers to make clear that these are organization-based differences rather than differences based in the subject matter. The school mean is also shown. (See Figure 1 to compare the Collegiality mean for Site 10 with that of other CRC sites.) Though this is the largest and most departmentalized school in our sample,⁷ we see similar contrasts in teacher collegiality among departments in other regular high schools in the medium to large size range. This case example shows almost as wide a range of collegiality scores between the most and least collegial departments as between the most and least collegial schools (see Figure 1). Indeed, the department can be a most important organization context for this dimension of teachers' professional community.

We also have evidence that cross-department collegial networks and teacher leadership can generate inequalities in teachers' experiences of collegiality in a large high school. Just as students are more and less integrated into various collective activities in a comprehensive high school, their teachers may be more or less central or peripheral to "elective" faculty endeavors and may come to have very different perspectives on their collegial environments. Our research over

⁷ Department Ns for the means shown range from 21-5, with a mean for the seven departments of 14.

A CASE EXAMPLE: CRC SITE 10

DEPARTMENT VARIATION IN COLLEGIALITY



■ National sample of public school teachers □ School mean on Collegiality index ◆ Department mean on Collegiality Index

* Subject areas are represented by codes to protect the anonymity of teachers' responses to collegiality questionnaire items. Means are plotted only for departments with ≥ 5 teacher scores.

the next year includes analyses of teachers' networks in CRC sites to understand better how they emerge and how they do and don't meet the needs of the faculty as a whole. We will be concerned with such site-level policy issues as what kinds of decision domains and processes should be mandatory and elective in a faculty.

Faculty morale. The 1990 teacher questionnaire included a new series of items on job satisfaction that allowed teachers to express positive and negative feelings about a wide range of job conditions -- from pay and benefits to professional prestige to colleague and parent support to class assignments.

Figure 2 displays CRC site scores (teacher averages) on this overall morale measure and 1990 scores on principal leadership. The data show substantial differences across CRC schools on levels of teacher morale which follow fairly closely differences among the sites on teacher evaluations of their principal on dimensions of leadership and support. Departures from this pattern shown for Sites 11, 12, 05 and 09 appear to be compensated by levels of collegiality shown in Figure 1. This suggests that collegiality might substitute for principal leadership in sustaining teacher moral at a moderate level.

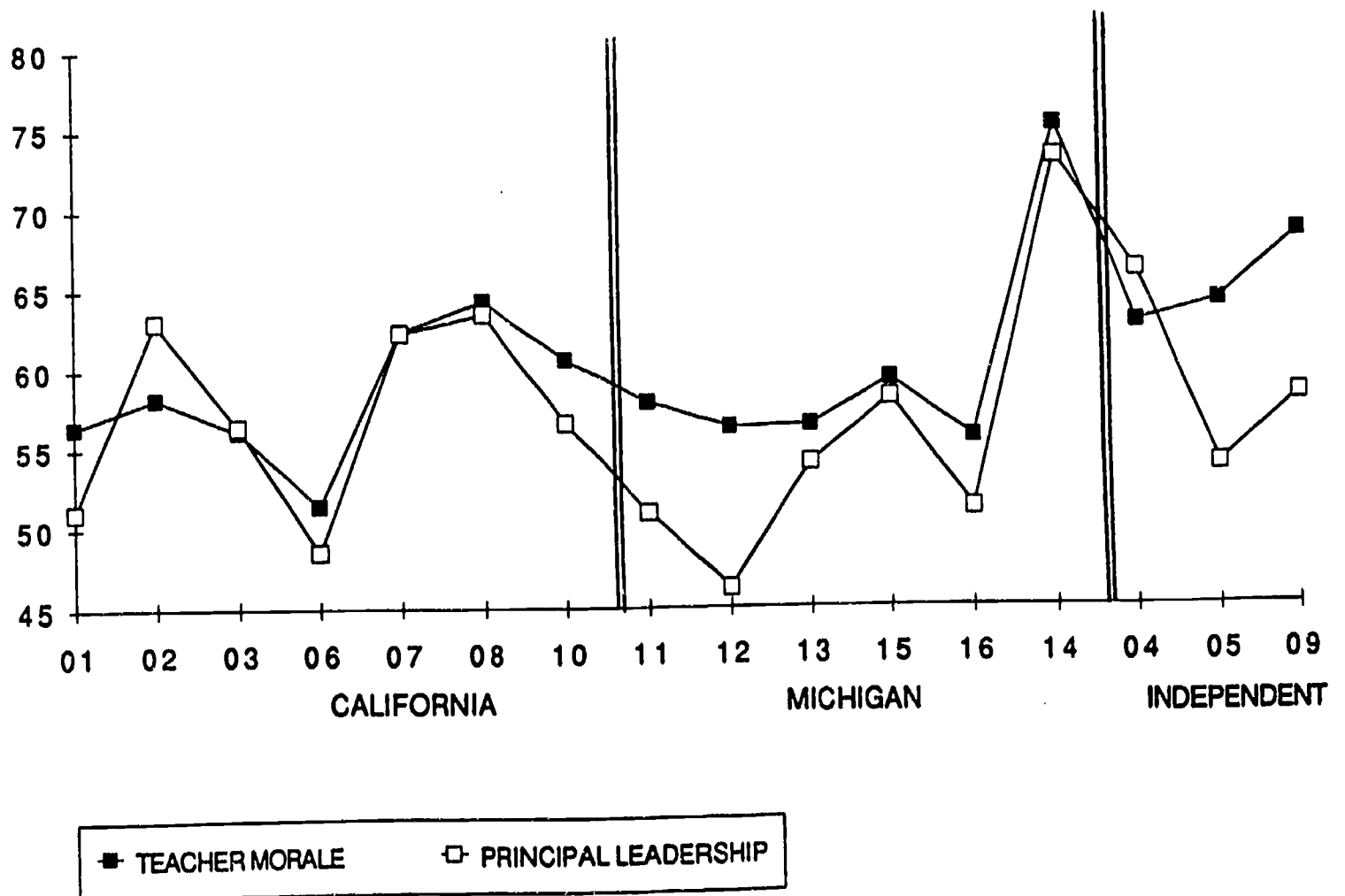
Our first-year field research sensitized us to the critical roles that site-level leadership plays in socially constructing conditions of the secondary school workplace. This perspective emerged in Center research largely through research in public and private "mission" schools in which principal leadership is critical for establishing and maintaining job conditions, ideology, and rewards that support teachers' collegiality and morale. Continued CRC research provides increasing evidence that "leadership matters".

Apart from the role of setting and maintaining a sense of shared mission and environment of mutual respect among adults and youngsters, the strong leaders in CRC schools have understood the need for and successfully established the problem-solving structures and resources teachers need to manage day-to-day challenges of the teaching job. The nature of these specific teaching problems or challenges can be quite different across schools -- for instance, dealing with high rates of class cutting vs. dealing with students' stress over the college admission process. Thus, the particular focus and structures provided by effective leadership are quite different across our high morale faculties.

The important observation is that high faculty morale is closely tied to leadership that supports and maintains structures and norms of collective problem-solving. The consequence for teachers is a strong, positive sense of professional community at the school level and a view of teaching as a collective, not just

FIGURE 2

TEACHER MORALE AND PRINCIPAL LEADERSHIP



an individual, responsibility. Teachers working in such settings feel less isolated and, particularly in schools serving students with such difficulties as limited English proficiency, low academic motivation or skills, dysfunctional behaviors, feel supported in efforts to devise effective solutions or reconcile disappointments.

Professional Self-Efficacy: District and Classroom Contexts

Teachers' sense of efficacy--the extent to which they believe they are making a difference, being successful with their students--has long been considered a critical variable in educational research. Teachers' reported sense of efficacy is associated with the educational outcomes of greatest interest to educators and policymakers, student engagement and achievement.⁸ Past research has shown important school workplace differences in teachers' sense of efficacy. An important and unexpected finding of our comparisons of CRC school averages in teachers' self-efficacy scores is the significance of the district to teachers' sense of efficacy. Past research has cast the district as a relatively unimportant influence on teachers' day-to-day worklives; yet we see that the district matters for teachers' sense of efficacy in the classroom. District differences in teachers' sense of responsibility and capacity to reach all students are greater than school differences within districts and comparable to sector differences among the schools in our sample.

District contexts. These results are most striking for California districts, which show substantial between-school differences on measures of faculty collegiality, principal leadership and teacher moral (see Figures 1 and 2). In contrast, the faculty efficacy scores shown in Figure 3 differ more between District 1 and District 2 schools than among schools within each district.⁹

To try to explain this district effect we considered both ways in which the two districts differ and how these differences might affect a teacher's sense of efficacy. The district variables that first came to mind were a) differential efforts to reform (and centralize) the secondary school curriculum and

⁸ See, for example, Patricia T. Ashton and Rodman B. Webb, Making a difference: Teachers' sense of efficacy and student achievement. (New York: Longman, 1986) for a detailed analysis of the relationship between teachers' assessments of their efficacy and student achievement.

⁹ While the between-district difference is only about one-half the average within-school standard deviation on this index, differences between schools in a district are negligible.

FIGURE 3

FACULTY EFFICACY BY SCHOOL, DISTRICT, STATE, AND SECTOR

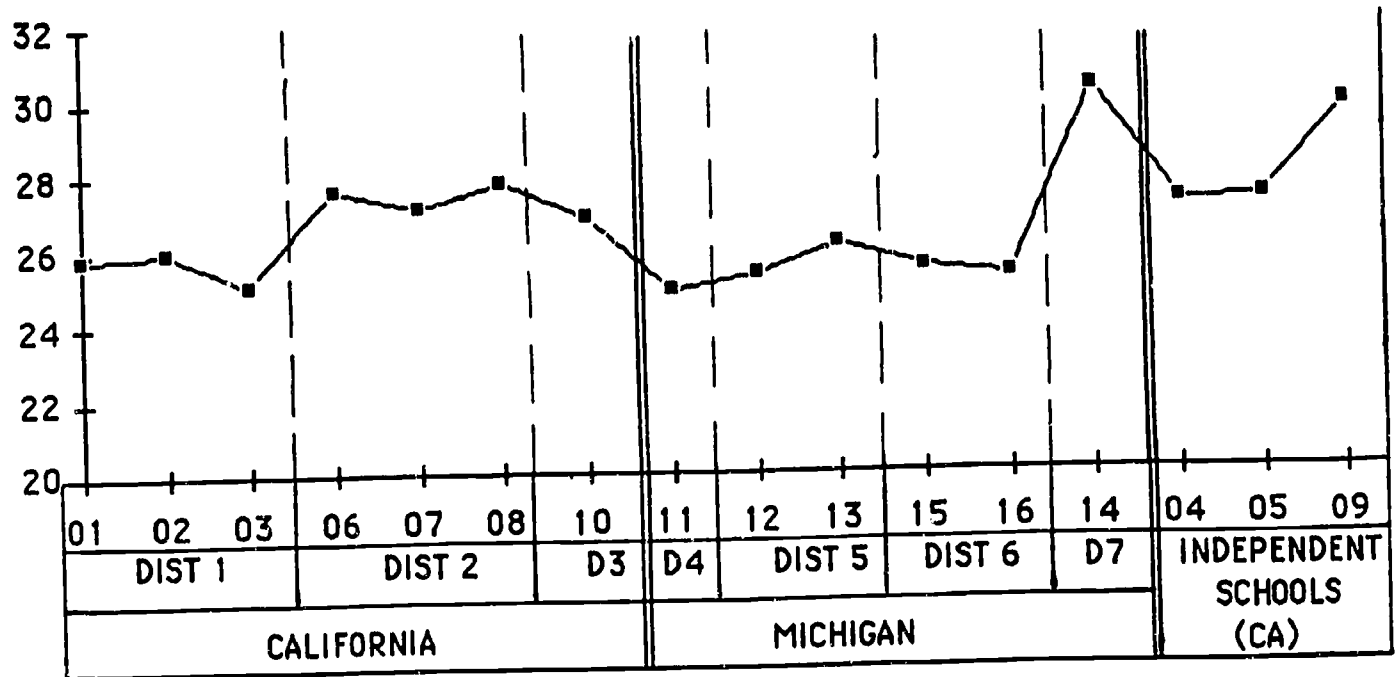
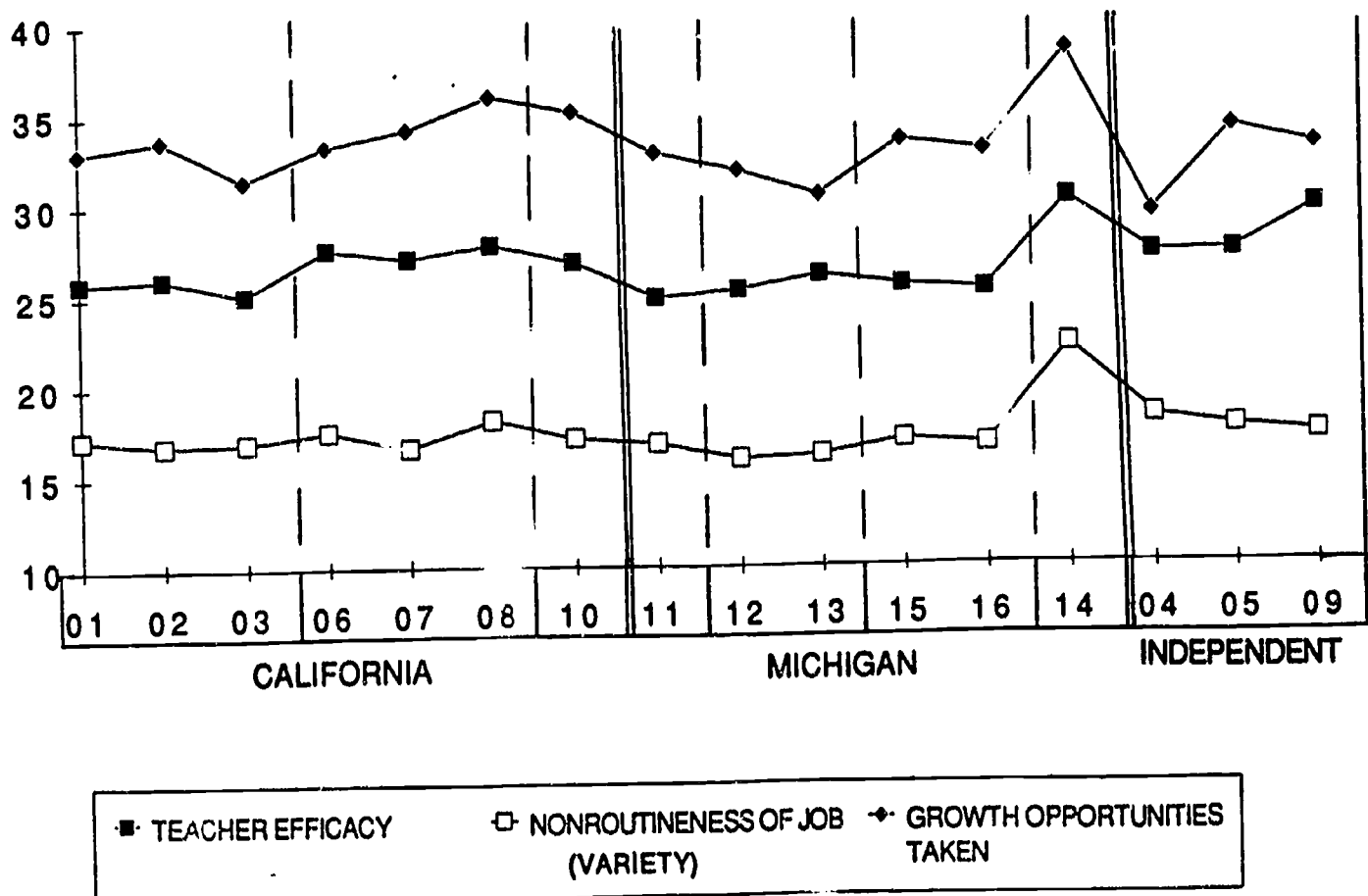


FIGURE 4

FACULTY EFFICACY IN RELATION TO PERCEIVED JOB VARIETY AND PROFESSIONAL GROWTH OPPORTUNITIES



b) professional growth opportunities supported. District 2 (Sites 06,07,08) is highly active in both areas and District 1 (Sites 01, 02, 03) is doing little to either redefine the subject area curricula or to promote teachers' professional growth. We reasoned that District 2 policies that both disrupt teaching routines and provide professional growth opportunities might enhance teacher's sense of efficacy, on average, in these urban schools. To test this hypothesis we compared school and district scores on the measures of: Perceived Job Variety (or reported "nonroutiness" of day-to-day teaching) and Growth Opportunities Taken (teachers' ratings of the value of a wide range of possible sources of professional growth). (Appendix 1 provides the content of these measures.)

As shown in Figure 4, there is as much variation among schools within the California districts (Districts 1 and 2) as between them on our survey measures of job perceptions and growth opportunities taken, and there is as much variation between schools in each district. The data for Michigan schools and districts also show negligible school- or district-level differences in professional growth and efficacy scores. While our survey data do not allow us to investigate the efficacy pattern further, we have two alternative explanations which are consistent with interview data on district policies and practices.

One has to do with different district cultures. District 2 and District 3 invest use a number of strategies to underscore the view of teachers as professionals. These districts involve teachers in genuine decisionmaking roles, attend to professional development needs as defined by teachers, and are sensitive to the signs and symbols that can undermine or support public representation of teachers' professionalism. These signals of district definition of teachers as professionals range from annual dinners, to calling cards, to teacher-initiated projects, to teacher-run curriculum committees. Further, both Districts 2 and 3 encourage and support teachers' efforts to play an active role in state and national professional organizations.

District 1, in contrast, has developed a professional culture at the district level that is perceived by teachers as devaluing, "infantilizing" and absent in trust of teachers' judgments or abilities. If teachers view themselves as "professionals" in Districts 2 and 3, they see themselves as "workers" in District 1. District 1's history of bitter labor disputes, closed door sessions, them/us divisions, and obstructed [or missing] channels of communication from the central office to the school sites lead many teachers to see their work as a "job", not as a professional commitment.

Second, these districts have importantly different technical problems and constraints on effectiveness. District 3 serves an

education-minded clientele and has a relatively homogeneous student body. For the most part, students [and their families] in District 3 are academically motivated and well-supported. District 2 serves an exceedingly heterogeneous student population, but policies adopted in response to that heterogeneity, most particularly desegregation policies, minimize the problems associated with busing. District 2's desegregation strategy establishes "families" of schools which youngsters may elect to attend. As a result, neighborhoods bus students to the same schools; youngsters from the same elementary and middle schools come together in desegregated high school settings, and faculty have the opportunity to become familiar not only with neighborhoods, but with siblings and families. Students may not elect to transfer out mid-year, or to enroll in a different secondary school. This policy brings some measure of stability to the inevitable disruption of a busing plan.

District 1's desegregation policy, in contrast, undermines teachers in many settings. Open-enrollment, coupled with substantial mobility into and out of the district, sets up a highly unpredictable and unstable student population. Enrollment quotas for minority youngsters in their neighborhood schools sends the "spillover" of most recent immigrants to any of the other district high schools -- a student's second, third or even fourth choice. Teachers and administrators in our District 1 schools perceive that many of the bused students did not choose the school and thus have a negative attitude about the school and their classes. The long bus ride for these students in many cases is not being compensated by a positive sense of having chosen the school or being entirely welcome. Transfer rates for these schools are substantial among both bused and neighborhood student populations.

Classroom contexts. Our research has also been analyzing sources of variation in teachers' sense of efficacy within a school. While some individual background factors seem to make a difference, a important source of variation in teachers' sense of efficacy is their class assignments in terms of student achievement level. Our analyses of both national and CRC survey data show that teachers assigned to predominantly low-track classes are significantly lower in self-efficacy, while teachers assigned to predominantly high-track classes are significantly higher in self-efficacy than colleagues teaching average or mixed class assignments.

Further, our CRC survey data on teachers' ratings of the extent of success they feel with particular classes suggests that high school teachers' sense of efficacy can and does fluctuate over classes in the course of a day according to the students' achievement level and engagement and the teachers' sense of

preparation to teach the class.¹⁰ However, where teachers collaborate as a faculty or as a department, the negative effect of class composition on teachers' sense of efficacy is weakened because of the support, encouragement and professional expertise that is gained through these collegial interactions.

The class level thus far has been ignored as an important organizational unit for teachers' work and for educational improvement. As research on teaching was extended from primary to secondary grades, secondary teachers' jobs have not been conceptualized by researchers as they are: typically a sequence of five teaching assignments (subject x course x grade level/age x student achievement/motivation group) over the course of a day. Teaching competence and success has been conceived in global terms -- as individual preparation in a subject area, as teaching competence -- not in terms of the specific and often very different classes a teacher meets every day.

Our findings thus far suggest that class assignment practices (the matching of teacher, course/subject, student group) is an important and neglected domain for micro policy analysis in secondary education. And, while attention has been paid to student assignment (sic. tracking) practices, the teacher and teaching side of the matching processes have been ignored and are critical foci for policy-oriented research. For example, we have observed instances of "good" teacher tracking where, following department or school-level discussions, teachers are assigned to classes which mesh with their training and orientation to students. Teachers so "tracked", we suspect, have a higher sense of efficacy than do their colleagues assigned responsibility for subject areas in which they lack confidence or training or for students with whom they cannot relate effectively.

School leaders who understand the importance of structures that support collective problem solving also seem to understand that designing teachers' class assignments involve more than filling time and course slots. All secondary school settings in our sample operate under the same complex constraints of required courses, course sequences, extracurricular conflicts, busing schedules and uneven student demand. However, leaders in a few of our schools explicitly acknowledge the consequence for faculty morale, efficacy, and satisfaction [not to mention student outcomes] of a good match between teachers and classes. In high

¹⁰ A study conducted by Raudenbush, Rowan and Cheong showed that variation among teacher ratings of how successful they feel with particular classes varies nearly as much across the 5 or so classes taught by a teacher as across teachers (43% of the class-level variance is intra-teacher variation, while 57% is inter-teacher variation).

schools where that preferred match cannot be achieved, school or department leaders devise strategies that distribute problematic class assignments equally among faculty. These teacher assignment policies serve to diffuse teacher resentment or desperation when "fit" is not a good one. In these settings teacher assignment is framed fundamentally as a professional issue; in other settings, teacher assignment decisions are thought about in the political terms of who gets the "best" classes and/or in the management terms of satisfying requirements of the master schedules.

Perceived Job Variety, Standardization and Control: Subject and District Contexts

Conceptions of the teaching job is an important dimension of professional community. Teachers who lack common definitions of their professional roles and/or whose salient work challenges and resources differ substantially are missing important features of professional community. Sources of common job experiences and perceptions among teachers include school mission and/or homogeneous student body, subject matter, and curricular policies.

As displayed in Figure 4, teachers' conceptions of the variety or nonroutineness of their jobs from day to day varies little across schools. Except for the unusually high overall level of job variety shown for the Michigan alternative school (Site 14), school means on this measure are nearly the same.¹¹

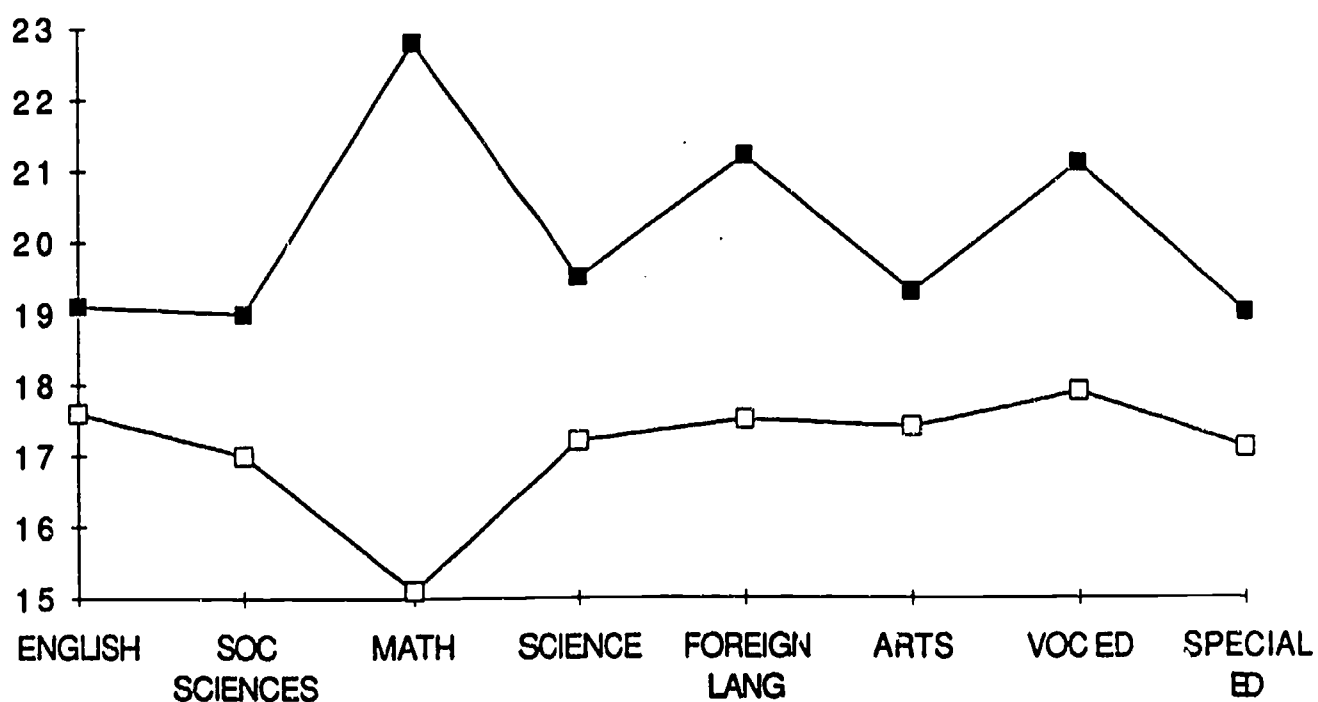
Subject matter appears to be an important source of variation in teachers' job conceptions within schools. The Center's line of research on subject matter as teaching context has identified specific subject differences in task conceptions, instructional practices, coordination and control.¹² As shown in Figure 5, mathematics teachers are considerably less likely than teachers of all other subjects to see their jobs as varying from day-to-day; in other words, they conceive of their jobs as more routine than do teachers of all other subjects. This pattern can be explained by greater standardization and sequencing of course content in high school mathematics than other subjects -- which makes the teaching job more predictable and, apparently, routine

¹¹ The range of means on this variable (an 18-point scale ranging from 6-24) is 2.2 (omitting Site 14), much lower than the average within-school standard deviation of 3.3.

¹² This work is being conducted by Pamela Grossman and Susan Stodolsky and will be highlighted in next year's CRC Report to field sites. The analysis reported here concerns organizational dimensions and implications of subject differences in teachers' job conceptions.

FIGURE 5

SUBJECT DIFFERENCES IN PERCEIVED JOB VARIETY AND CURRICULAR
STANDARDIZATION



■ STANDARDIZATION THROUGH
CURRICULA & EXAMS

□ NONROUTINENESS OF JOB (VARIETY)

on a day-to-day basis. (See the plot of subject means on this variable in Figure 5). The difference for math teachers, on average, in subject matter constraints and job conceptions could be a source of cohesiveness among math teachers and/or a constraint on math teachers' integration into school-wide professional communities. We will explore this possibility with CRC data on teachers' professional networks within each school.

Notably, the policy contexts of school sector and public school districts and states make a substantial difference for teachers' job conceptions within particular subjects. Analyses of teachers' perceived job variety by subject and policy context indicate that for all subjects but mathematics there are substantial differences within subjects and across policy contexts in job conceptions.

Figure 6 plots subject means on the job variety measure for the three California districts (Mostaza, Adobe Viejo, and Oak Valley by pseudonym), all Michigan schools and the two college-preparatory independent schools. Among the California districts, English teachers show the greatest differences in conceptions of their work as more or less routine. Social studies and science teachers show between-state difference, with Michigan teachers in each of these subject areas reporting less variety than California teachers.¹³ Another noteworthy state difference is the apparent tendency for the California policy environment to generate local differences in subject area instruction policy, since all three Michigan districts show very similar subject scores on the job variables analyzed here.

We examined teacher reports on the extent of their control over course content as a possible explanation of the district and state differences. For example, do California district differences in extent of policy controls over English instruction underlie the district differences in English teachers' perceived job variety? Similarly, are social studies and science instruction more tightly control in Michigan than in California?

As shown in Figure 7, we find very little support for the notion that policy constraints on teachers' choices of course content, topics and skills to be taught underlie differences in their perceptions of more or less variety in the teaching job. Most notably, mathematics teachers -- who show essentially no

¹³ Michigan districts are not shown separately in Figures 6 and 7 because they show substantially fewer contrasts than do California districts; the means for the state fairly represent all districts with one exception. One of the three Michigan districts has a social sciences mean on the job variety scale comparable to that shown for the Mostaza district; the other two districts conform to the state pattern shown in Figure 6.

FIGURE 6: JOB VARIETY BY SUBJECT AND POLICY CONTEXT

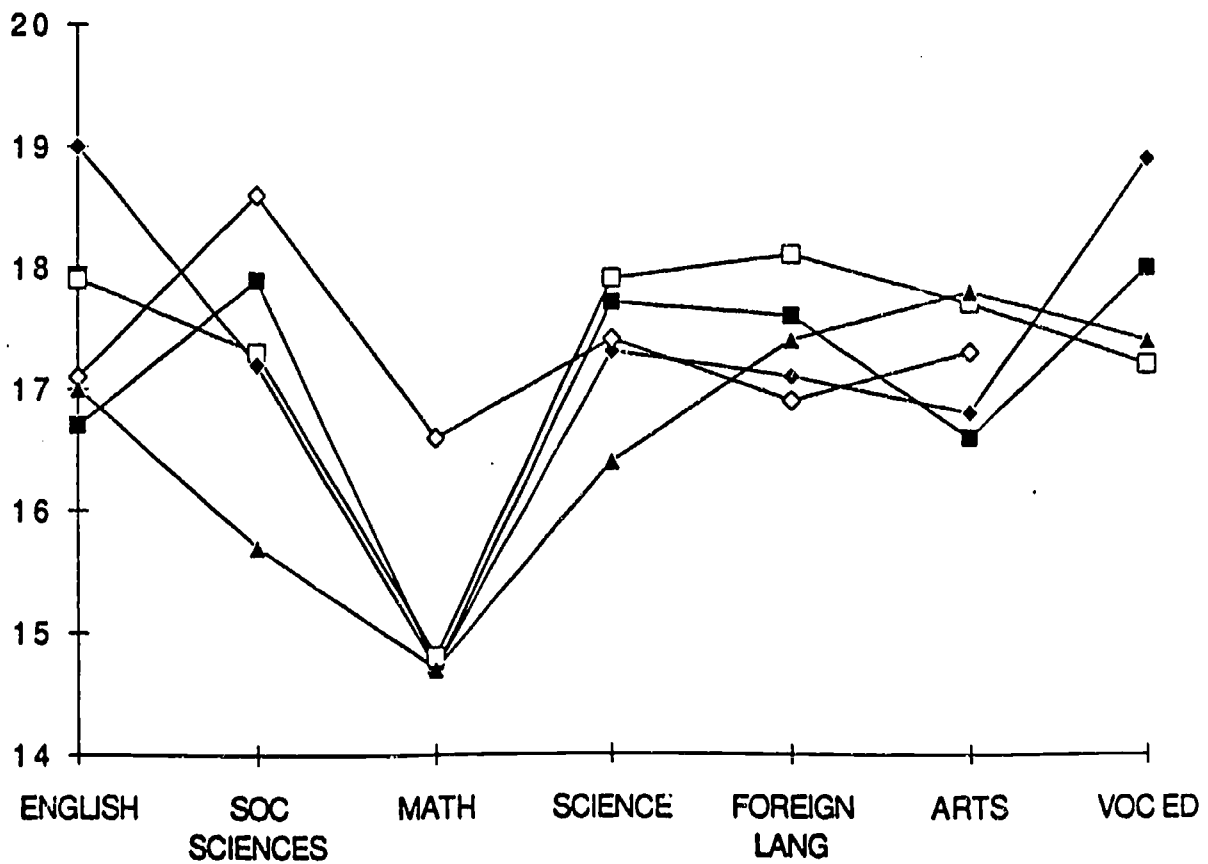
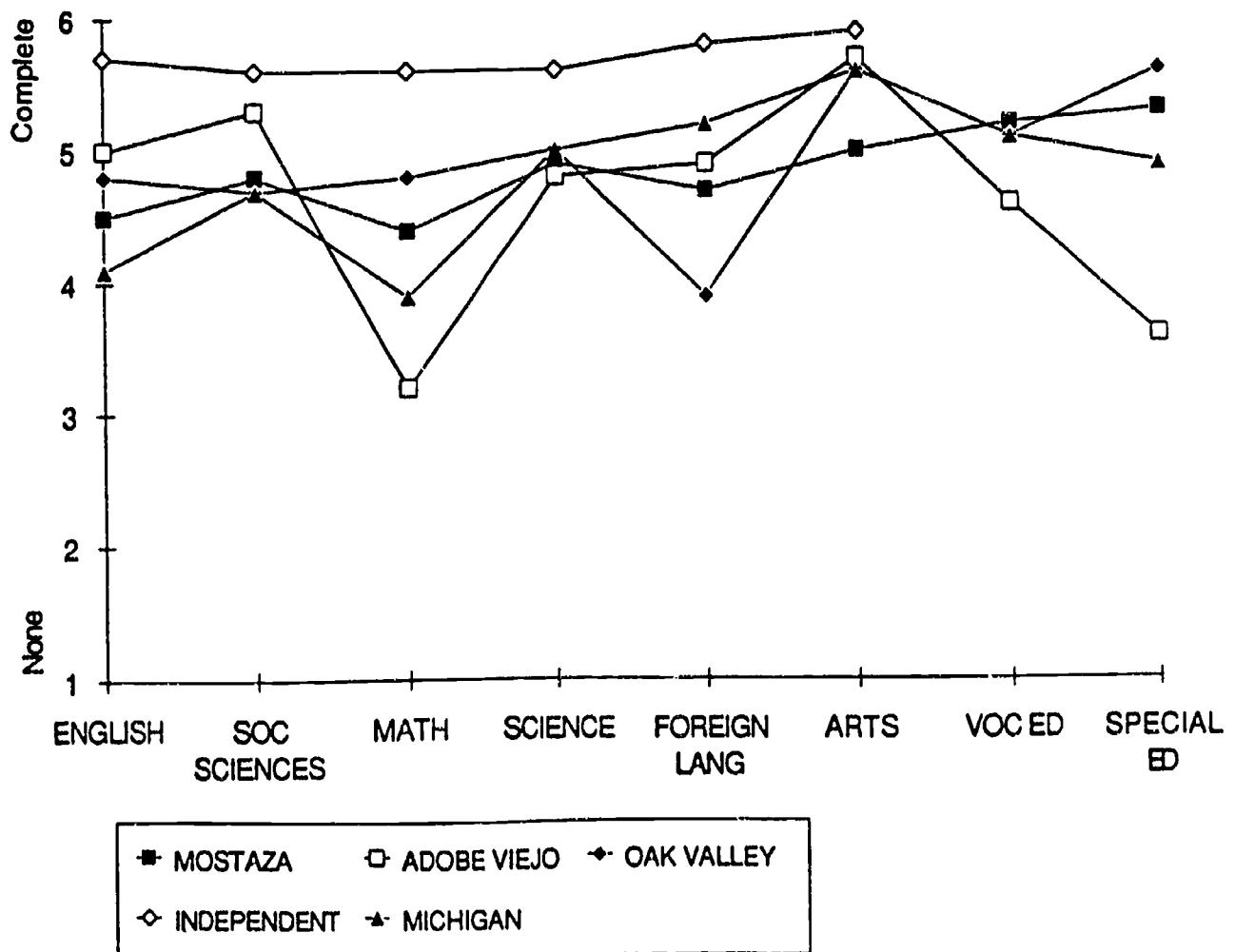


FIGURE 7: CONTROL OVER COURSE CONTENT, TOPICS AND SKILLS TO BE TAUGHT BY SUBJECT AND POLICY CONTEXT



variation across public school policy contexts in perceived job variety -- show the biggest between-district variation in reported control over instructional choices. For English teachers, reported control varies much less across policy contexts than does perceived job variety. The fact that Michigan social science and science teachers report levels of instructional control comparable to those reported by their California counterparts suggests that state policy constraints are not the source of their tendency to see their jobs as more routine.¹⁴

A striking pattern shown in Figure 7 is the uniform and very high level of reported control over course content among independent school teachers in all subject areas. Despite subject differences in reported job variety and standardization within the independent sector, teachers of all subjects feel a much greater sense of control over the content of their teaching than do their public school colleagues.

In sum, we have seen that school is only one of the contexts that matter for teachers' experiences and conceptions of their jobs and, thus, only one of the organizational boundaries of teachers' professional communities. While collegiality and morale vary across schools and departments within them, teachers' sense of efficacy seems affected most by particular classroom contexts and by the district context. State and local policy contexts, as well as subject matter, seem to shape teachers' conceptions of their work -- an important dimension of professional communities.

We have only sketched some of the factors that might explain the patterns we observed. The next step in this line of analysis is to specify in more detail how and why the different contexts affect teachers' worklives. We will pursue, for example, the question of how and why some departments function as productive professional communities and others in the same school do not. Similarly, we will ask how and why district and sector contexts matter for teachers' sense of efficacy and conceptions of teaching. In this way, we should be able to formulate context-specific policy recommendations that, taken together, forge stronger and more productive professional communities for teachers.

¹⁴ Note that the measure of instructional control is based on a single questionnaire item replicated in CRC surveys from the High School & Beyond national survey. As shown in Figure 7, the subject means generally fall in the upper range on the scale. The national data for this measure of instructional control yield subject differences that most closely approximate the pattern shown for Mostaza in Figure 7.

II. Teachers' Perspectives on Today's Students

The character of "school" and the activities it engenders are created jointly by the adults who work there and the students who fill the classrooms. Together, teachers and students construct the accomplishments, satisfaction and character of a secondary school and classrooms. An important focus of the Center's work is to understand this process: What factors shape it? what are the consequences for students and teachers? This section draws primarily upon our qualitative data to review our preliminary findings about teachers' perceptions of and responses to today's students.

Teachers' perspectives on today's students

Across all of our secondary school sites, veteran teachers comment that the students they teach today differ in important ways from the students of twenty, fifteen or even five years ago and that these differences have critical significance for how they feel about their role. Today's students comprise different student groups, bring different attitudes and supports to school, and even middle and upper class students operate according to different norms and mores than did students in the past.

Today's students. The first thing teachers mention in discussing the differences they see in student is changed family structure. Teachers join other social commentators in pointing to changes in families and the negative consequences of these changes for youth.

A Michigan teacher:

...the biggest change [in today's students] is that there is a lot less support from home...not just here but across the country...a lot of kids have very little support at home, a lot of single parents...we have a lot of kids who don't even live at home..the biggest change is in family structure...these kids just don't have the things [in terms of family supports] the kids used to have...ROB15:90-178.

Lack of parental involvement in homework, school affairs or the high school careers of their children more generally shows up in undone homework, apathy about school and insufficient support for student efforts, teachers say.

Family transience is another serious problem for many of today's youth. A teacher in a Michigan school particularly troubled by high student mobility commented that some of the seats in his classroom had been occupied by three different students over a two week period. Another stressed the frustration of this lack

of stability in a class: "You know, you just pass out a book and get this kid started, and two days later this one is gone and another comes in and says 'where are we'...you just can't ever catch up with all of them." CHAR16:663-679

Public school teachers feel the dysfunctional consequences of today's changed family structures most acutely. "Homelife", according to many public school teachers, is the crux of the difficulties they encounter with today's students. Independent college preparatory school teachers on the other hand, see fewer and less dramatic changes in the families sending students to their schools than do their colleagues in the public schools. Independent school parents, like parents of the past, are highly supportive of teacher and school efforts to enable their child to succeed.¹⁵

Poor attendance is the "student problem" raised most frequently [and most passionately] by public school teachers. Teachers in all public CRC secondary schools report that "attendance is horrendous". The frustration of a Michigan English teacher about failed lesson plans and incomplete work captures the sentiments we heard from teachers in all our sites:

...no one yet has figured out how do a process [of developing a writing project for publication] with kids who are here for a day or two and then gone for a day or two...it is difficult in all literature classes to teach kids who are just not here... ROB15:750-815

The fact that so many teens have cars, and that parents are not paying attention, makes it easier to skip; but the root problem, teachers believe, is that many students just don't care. And even when students come to school, they often are tardy for class or skip some classes altogether. Again, teachers in independent college preparatory schools do not experience these attendance frustrations. To this point, the school head of the elite independent school in our sample commented:

...we are very fortunate in terms of our student body. We don't have many students who don't want to be here. And once they're here, we don't have many people who won't work hard and really make the effort. So it is very, very different from the public schools....PA03401A:692-707.

General lack of respect for authority among today's adolescents also demoralizes and frustrates public school teachers. The language, attitudes and behavior of many youths

¹⁵ See Appendix 2, Section V, for a comparison of perceived parental support across CRC sites.

contrasts sharply with that of yesterday's students and with the principles of teacher/student interaction most teachers were raised with and expect in their classrooms.

Teachers also point to ways in which the academic backgrounds and skills of today's students differ importantly from those of students in the past. A uniform complaint about today's adolescent, especially among public school teachers, a general lack of reading. Students in high school today typically spend little time with books and have little interest in reading. Teachers report that this feature of today's student shows up in the weak general knowledge students bring to class as well as their unwillingness or inability to read difficult (or lengthy) texts. Furthermore, a number of teachers agree with this math teacher's complaint that "too many students today just don't like to think..."

Dysfunctional behaviors and activities trouble teachers in all our secondary school sites, but again, most especially in the public school sites. Involvement with drugs and gang violence prematurely end the high school careers of many youngsters, especially youth from lower income, urban neighborhoods. In every school, teachers commented on the disturbing number of teen pregnancies and the students they lose either figuratively or literally as a result. A government teacher complained that it is hard to stand up and talk about the Soviet Union "when you have five young ladies who are concerned about who is babysitting. It is difficult to get through about social concerns because they have so many themselves..." RAN15:782-794.

Other factors compete with academics. Many lower income youngsters are unable to spend time on schoolwork because of heavy family responsibilities. Jobs take the attention and energy from students of all SES backgrounds, but most especially the less advantaged teen. But even students at the elite independent school in our sample have jobs "to get more money to buy more clothes or things like that. And they take on more than they can handle." (PA03401A:1517-1530)

Some teachers express concern about the attitudes of today's hardworking, top students as well. These students, teachers report, are even more highly competitive and grade oriented than were the high achievers of the past. The resulting "grade grubbing" frustrates teachers eager to impart love of a subject area or conceptual understanding of a discipline. The head of an elite independent school:

...this is an uphill battle [to get students] involved with the subject matter and not just go for the grade...back in the 60's there were kids who loved Thoreau and carried copies of Hesse around in their pockets. These were the questioners...they always

asked 'why'? And now I see a change more toward gritting their teeth, not rocking the boat and getting good grades. You have to force them to have an opinion. (PA03401A:184-370)

Today's student body composition also differs dramatically from yesterday's in many schools. The sharp increase in language-minority students, particularly in California, presents difficult challenges for secondary school teachers. Today's classrooms are occupied by students with diverse cultural backgrounds and language skills. And in many schools, demographic changes in student body composition have been swift. Faculty in one of our sites has in little more than two years seen their student body change from a predominately white, middle class cohort to a student group in which approximately 1/3 have only limited English proficiency and 2/3 come from lower SES families.

As this example suggests, the SES of student bodies in many schools has changed rapidly as well. An administrator in a California school whose student body has been reshaped by district busing policy and the arrival of immigrant families commented:

Five years ago we wanted to give a needy family a basket for Christmas and couldn't find a needy family. This year we're feeding hundreds of kids breakfast and lunch every day. RA08102A

One feature of today's student body, many teachers and administrators believe, is that "there is no middle anymore". Every school has some top students; but teachers and administrators believe too many are at the bottom. Attendance problems, disinterest, poor academic skills, limited English proficiency, counterproductive behaviors, competing demands for time and energy combine to depress the academic motivation and accomplishment for many of today's high school students. A California principal says:

One of the scariest changes I have seen is the polarization within our schools. We have those who do very, very well and they learn so much more today than they did maybe 20 years ago. But on the other side of the coin we have those who can't do much at all...that's one of the most profound changes of all. RA0812A

Teachers' responses to today's students

Public school teachers face the significant challenges in responding to today's students. Today's students call to

question traditional authority relations, pedagogy, and instructional goals. Teachers find that the classroom strategies and expectations that "worked" for past students often are unsuccessful with today's student.

Among the schools in the CRC sample, teachers have responded to the demands and challenges of today's students in various ways. Some have given up, electing on-the-job retirement and expect little from the students whose attitudes, behavior or academic skills differ from the students they "used to have". Others have worked to maintain traditional standards and expectations. Still others have changed expectations or practices. (See Table 1 for a schematic representation of these alternative adaptations we find in our interviews with California and Michigan teachers.)

Many of the teachers who have given up or who try to find ways to continue traditional practices see the problems evident in their classrooms primarily as the students' problems, exacerbated by inadequate school or district discipline or "standards". Teachers who view today's classrooms this way tend to frame solutions in terms of tougher rules and enforcement, rather than adaptation of their own practices or task conception. For example, a California math teacher with more than 30 years' experience believes that "...the kid here is where the problem is today. There is nothing wrong with the curriculum." The appropriate response in the mind of this teacher is "...to kick butt and take names...be like a drill sergeant in the Marine Corps...the first guy that gets out of line...just give him the bum's rush right out the door..." (VA055STB)

Likewise, a Michigan physics teacher believes that the problems in the classroom result from

...a lack of discipline overall, throughout the school, throughout the district....educators ought to start exercising control of the situation more...these kids are hurting our programs because of their behavior, attendance, tardies....[I think] we should make an example out of those 50 kids so that the other 1050 will understand that we mean business...that we have some rules and we are going to follow. Basically...those kids don't fit into what we are trying to do and we don't have the time, the energy or the money to change or program to suit them...let's not sacrifice everyone, let's use that little group as an example... RAY15:1367-1426.

Other teachers see the problem as one of lack of fit between traditional practices and the students they serve today. A few teachers adopting this perspective believe that many of today's students "just can't cut it" and so lower standards, countenance

TABLE 1

TEACHERS ADAPTATIONS AND RESPONSES TO "TODAY'S STUDENTS"

Adaptations
to "New"
Students

Domains of adaptation

Teachers'
affective
responses

| | Authority Relations | Pedagogy | Content Emphasis | |
|---|---|---|--|-----------------------------------|
| Maintain/ enforce trad'tnl standards | more rules more sanc- tions | more work- sheets and tests | fail more addtn'l make-up, remedial | Burn- out; frustra- tion |
| change expec- tations | tolerate "dis- respect", disorder | tolerate inattention and in- completes | lower stan- dards for coverage/ achievement | Dis- engage- ment |
| change practices | construct group norms rule con- sensus | group work cooperative learning | process emphasis; broaden def- n. of ach. | efficacy fatigue |

missing homework and classroom inattention, and feel there is "just so much a teacher can do for these students." As a result, the academic value and content of these teachers' classrooms is diminished significantly from yesterday's. Other teachers cut back on the work they expect of their students in an effort to boost classroom accomplishments. In particular, some teachers have given up on homework and focus on accomplishing the important things during classtime. For example an English teacher in Michigan has completely rethought her instructional strategy when the students in her classroom today were failing:

I was looking over all their failures, it was no homework, no homework, no homework..So I found a book of plays and we started reading plays in classes...got them more involved, participating. I tried to keep written work to a minimum...I am really pleased with the results. COCH13:817-840.

Often, this retreat from traditional academics signifies a well-meaning attempt to structure a classroom environment that today's students will find engaging and non-threatening. However, we saw that in a few cases this teacher retreat from standards and academic quality unfortunately signaled disrespect or disdain for the students themselves. For example, a California teacher formerly assigned to honors classes and now teaching lower level sections certainly saw things this way as he talked about how the "lesser" students would be less work for him.

However, still other teachers who share the "lack of fit" diagnosis frame adaptation to these "new" students not as "less" of traditional activities but as different practices keyed to conventional standards and expectations. Teachers adopting this conception of the problem and of their task have made fundamental adaptations in what and how they teach and in the structure of the classroom. For instance, many teachers frustrated by student absenteeism believe that an effective response lies not in rules and stiff enforcement, but in school and classroom strategies that minimize the disruption and time demands generated by a high level of absenteeism. One teacher says she has learned to put "...all of the lessons on the board [so] whomever decides to show up will know where we are." CATH16 One school has set up study tables and a peer tutoring program that is available anytime in the day or evening to help students make up missed assignments.

Many teachers attempting to construct different practices believe that today's students require a high level of individualization: "You need to write out notes that Eric needs to do this today, and Scott should be sitting by himself on such and such a chapter, and we need to help Marianne with the research chapter, and...." IVA16:403-412. A number teachers have

found success with cooperative learning strategies as ways to both attend to individual student needs and to keep the class on track.

A number of administrators, too, see the key to devising effective responses for today's students in terms of differentiated strategies. For example, a California administrator who has seen his student body change from a college-bound majority population to a 70% minority group with limited academic aspirations advises:

We are struggling..the students are so fragmented and they have different needs; what works with one group doesn't work with another. The problem is to find cultural fit. As long as you don't have one program for all kids, you have a chance to begin to make a difference..there is no correlation between ability and dropping out. VA07002A:30-54.

Some schools have developed new curricula that enable teachers to motivate and engage students with limited academic interests or skills. A Michigan school has developed a Tech Prep program that provides students with practical skills and keeps the door open to college. In this program, for example, an English teacher works with an Industrial Arts teacher in a two hour block program that is part of a sequence in a tool and die apprenticeship. A California school has an innovative program that provides focused instruction in writing and study skills, counselling on college, and peer support for promising underachieving students.

While responses of teachers and schools to today's students differ, there is general agreement among teachers and administrators that "business as usual" will not be effective. A Michigan teacher of at-risk youngsters:"...teaching here is exhilarating but draining. If you come in here as a real traditional person with your goal being to get through academics and that's it, you are not going to make it as an instructor." ISAB14:114-132.

Another teacher advises:

[For the lower level kids] you have to deal with so many things...that are not related to content...they come in and want to talk about personal problems, family problems, what went on, why I'm feeling bad today, why I wasn't here last week, why I was suspended...you have to listen to things that come from the community, things that are going on in their lives....if you are text-book oriented or [totally academic] content oriented, you will lose quite a

few...they will give up and quit on you if you don't [pay attention to their personal lives] and if you don't provide a lot of positive reinforcement..."
HI00101:668-740.

A Michigan teacher sees the need for many teachers to change their attitudes about teens today;

[teachers] have to learn to treat the kids with the same respect that they would want to be treated with...they keep on telling me it wasn't like this 25 years ago [in terms of challenge to authority]. They are absolutely right, it wasn't and it is time for them to change in terms of how they deal with kids. Don't back that kid into a corner,...I've chewed some tail in my office, too, but I can do it with a little dignity.
CAL15 1654-1689.

These classroom and personal adaptations extract a tremendous price in terms of teachers' energy and morale. While some teachers continue to struggle to find ways to enable all of their students to succeed, others, after several years of efforts to respond to the multiple needs of today's students, have concluded that they "can only do so much" and adopted a policy of "triage". With regret, these teachers work hard to find successful strategies for a subset of their students whom they think can "make it" or who give evidence of sincere effort, and "let the others go." A California biology teacher explains her point of view:

...absenteeism has been a horrible drain...every year I pick three or four [of the chronically absent students] that I take on...they take a tremendous amount of time just to get talking with them usually takes two or three conferences. And then we design a contract and then we have to implement the contract...I have several parent conferences...I get them through. [But the others...]after a certain point I don't give them another minute of my time in terms of making [missed work] all up because it is completely futile...SC015TRA677-698;SC015TRB:275-317.

A Michigan social studies teacher has reached a similar conclusion:

...you have to call and find out why he hasn't shown up, if you can get hold of anybody. Then you've got to send out letters to that parent. Then you've got to follow up with a progress report..you've got to mark the student absent everyday. Then you've got to keep checking periodically to see if this student is still enrolled in your class. You're doing all this time for somebody you don't even know... I'm to the point that

I need to spend a little more of my time of the students that are in attendance. HI00101:1250-1284.

These teachers and others like them are with great personal regret giving up on many students in their classes not because they want to but because they feel inadequate support, time or energy to respond to their needs and still provide adequate instruction for other students in their classes.

The California biology teacher came to feel she had no choice:

I finally rebelled completely and said I would absolutely refuse to conference with any student unless he was failing only in my class. If they are failing all their classes, this is an administrative problem and I shouldn't be dealing with it. SC015TRA:677-698.

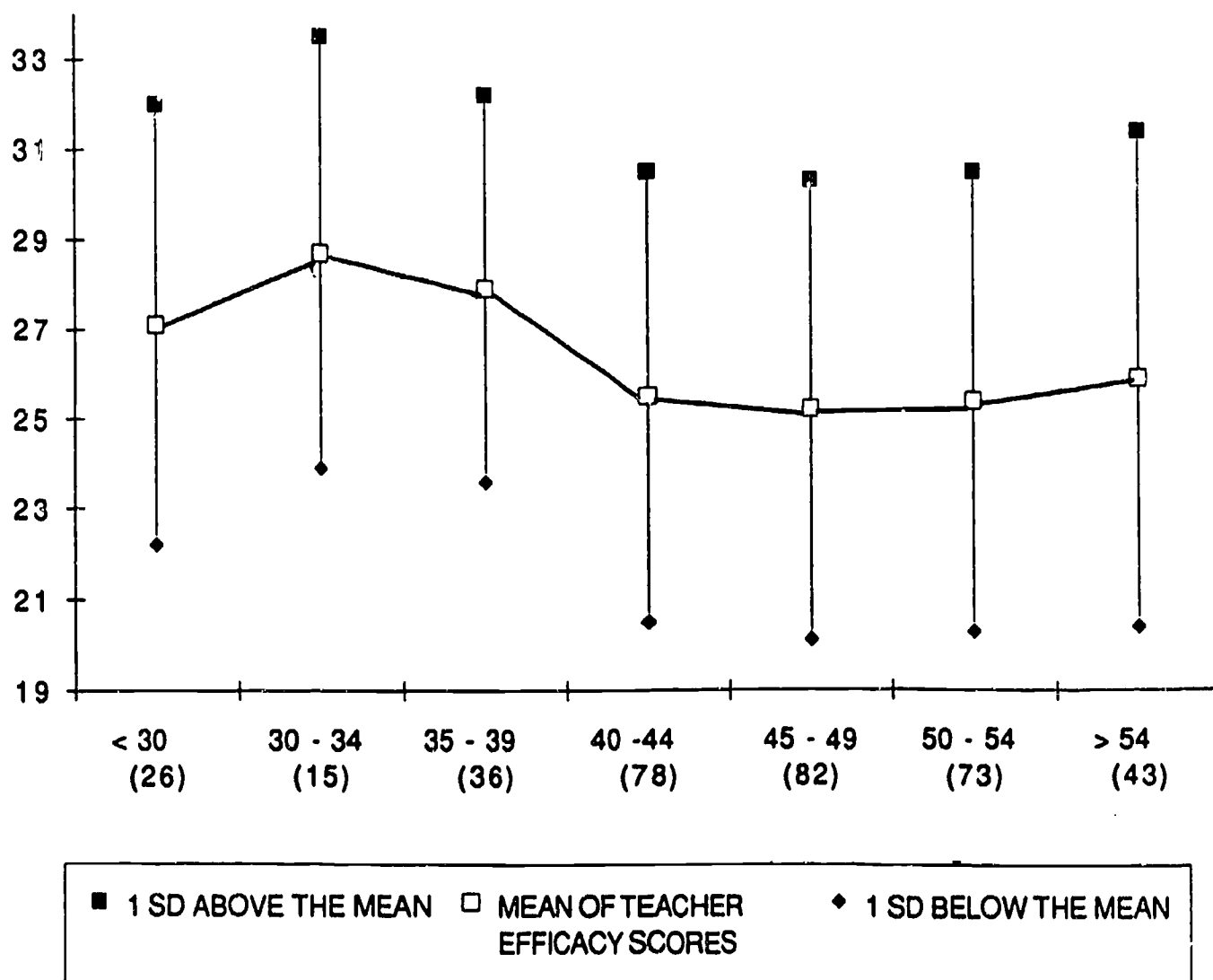
Factors influencing teachers' responses

Teachers' responses to today's students are shaped by personal, policy and organizational factors. Teachers' general orientation toward secondary school teaching plays a role. Teachers who frame their responsibilities primarily in terms of their academic discipline--teaching mathematics, teaching literature--sometimes are less inclined to adapt their teaching methods or plan of instruction in response to today's students than are their so-called "student centered" colleagues. This general orientation, however, does not generate an "either/or" condition. Teachers whom we judge as most successful in providing academic instruction to today's youngsters have accommodated both orientations in their responses.

The more important personal characteristic underlying teachers' responses to today's students is their age. Our data show a clear cohort effect in teachers' responses to the students of the 1990s. Figure 8 shows that, compared with their younger colleagues teaching in comparable urban school settings, teachers over the age of 40 display a substantially lower sense of efficacy, i.e., they are less likely to feel that they can be successful with all students in their classes. Veteran teachers are more troubled than are their younger colleagues by changed social mores and family patterns, for example. While both experienced and inexperienced teachers say that "today's teens are harder", teachers raised and trained in a different era have a significantly more difficult time adapting to today's students. As shown by the vertical lines in Figure 8, individual variation in public school teachers' sense of efficacy is substantial for all age cohorts. In other words, some veteran teachers continue to grow and feel effective in today's classroom; others fall well below the lowest level of reported efficacy for the younger

FIGURE 8

TEACHER EFFICACY BY AGE COHORT: TEACHERS IN REGULAR URBAN HIGH SCHOOLS*



- * Number of teachers for each age cohort is shown in parentheses below age ranges. Cohort means on the Efficacy scale are graphed horizontally; vertical lines show range of 1 standard deviation from each mean.

cohorts. These teachers feel powerless in dealing with today's students.

Figure 9 points to the elemental importance of the student for teachers' sense of efficacy. Whereas older public school teachers, on average, feel less efficacious, their colleagues in college preparatory independent schools appear to have increased somewhat in their sense of efficacy over their teaching careers.

The explanation for these differences between public and private school teachers, our field work suggests, lies in the different students they serve. While veteran public school teachers grapple with the classroom implications of today's students, teachers in independent schools essentially are teaching "yesterday's" students in terms of academic motivation, parental support and conceptions of authority relations. Independent school teachers' sense of efficacy, consequently, is enhanced as they get older and mastery of their subject area grows and pedagogical expertise accumulates.

Teachers' conceptions of their subject matter is another factor that influences their ability to adapt practice or pedagogy to students with diverse or different needs. In particular, teachers with orthodox conceptions of their subject have less inherent flexibility to adapt to non-traditional students. For example, a 10th grade English teacher who sees English as literature only has much more difficulty responding to students with limited English proficiency or academic interests than does an English teacher who sees English as communication and is less wedded to specific texts or content.

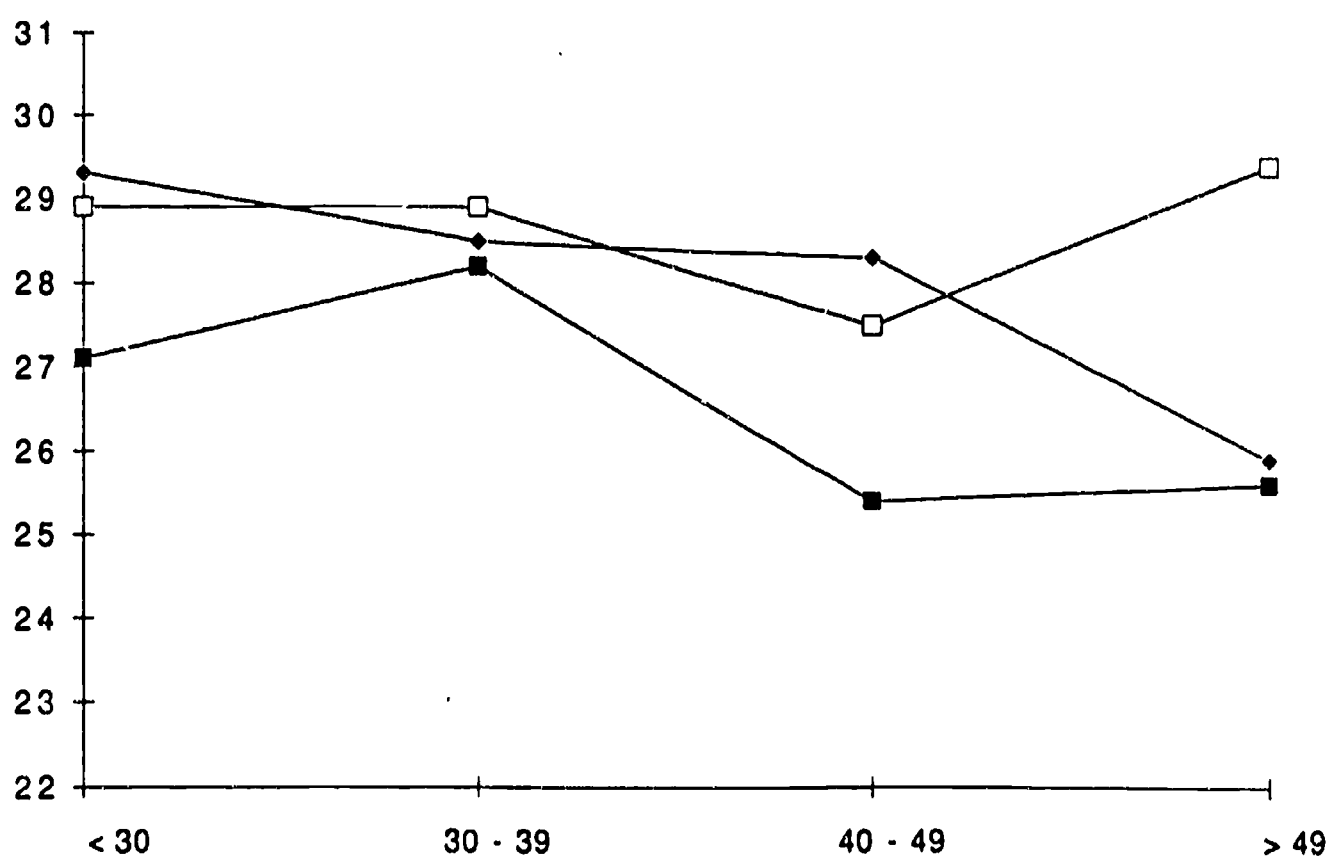
Factors in teachers' environment interact with their personal characteristics, basic orientations to task and subject area to further constrain or support teachers' decisions about classroom practices. In California, for example, state policy matters. California's mandated state curriculum framework constrains teachers' ability to change curriculum at the lower end because of specific content to be covered. The state framework, as well as district core curriculum policies, also limit the course options available to low achieving students.

Teachers comment that district desegregation policies also restrict their ability to provide extra help and assistance to students in difficulty since the students who most need the extra time and attention often are also the students who must board the bus right after school.

Important influences on teachers' responses to today's students also are found at the school site. School level norms and expectations are powerful influences on teachers' practice. The public and the independent alternative schools in our sample frame their mission in terms of personalization and

FIGURE 9

TEACHER EFFICACY BY AGE COHORT AND TEACHING CONTEXT



■ Regular urban schools
(CRC sites 02, 03, 06,
07, 12, 13, 14, 15, 16)

□ College preparatory
independent schools
(CRC Sites 05, 09)

◆ Urban schools with
collective problem-
solving structures (CRC
Sites 04, 08, 14)

responsiveness to students' needs. These schools have been established specifically to serve today's disenfranchised, disaffected adolescents. But school level norms and expectations operate also at Site 08 to demand teachers' positive response to difficult student problems. For example, teachers may not fail a student or send a student from class without having first exhausted a number of school-based solutions and resources--special tutors, an advocate, a peer counsellor, for example.

The expectations for adapting practices to meet the needs of students are supported in these settings by structures that enable collective problem solving and responsibility. At Site 04, faculty meet once a week to discuss students and develop strategies to respond to problems. Teachers at Site 02 meet to talk about curriculum and instruction for their rapidly changing student body. Teachers in a Michigan school are supported by a strategy of peer tutors; another Michigan school has implemented a mentor program in collaboration with a local bank to counsel students and their families.

Schools in both California and Michigan report success with a student "advocate" or support counsellor programs. A Michigan alternative school, for example, assigns each teacher 18 students; teachers visit homes, get to know parents, and check in regularly to encourage students to come to school. Sites 04 and 08 California and Site 14 in Michigan have established successful small group counselling sessions that provided a highly personalized support for students.

In schools where these building level norms and problem solving structures do not exist, teachers respond according to their individual preferences and capacity. Not surprisingly, teachers attempting to make adaptations in practice that could better serve their students often feel isolated and discouraged. For example, one teacher who had invested much personal time and energy working with the low achieving students in her school finally gave up after seeing her colleagues consistently arrive late and leave early.

Teacher "burnout", we have come to conclude, is related less to the demands and pressures on teachers to meet the needs of difficult or different students than it is to the absence of school-level supports for their efforts. Even within the constraints of the broader social and policy environment, we see that school leadership matters fundamentally to teachers' willingness and ability to respond effectively to today's students. One essential factor that enables teachers' capacity to meet the needs of today's students is the design and preservation of a "personalized" school environment, a setting in which teachers and students have personal knowledge of each other and are viewed as individuals not "just numbers". Establishing and

maintaining a personalized environment depends fundamentally on whether or not school leadership makes it a priority.

Another critical element is administrative support and maintenance of norms and structures of collective problem solving and promotion of a vital school-level professional community. We noted earlier that an important element of professional community, collaboration, mutes the negative effects of class composition on teachers' sense of efficacy. Our survey data illustrate the power of site-level professional community for teachers' sense of efficacy across age cohorts. Three of the schools in our sample, Sites 04, 08 and 14, are distinguished by strong professional community. Figure 9 shows that, unlike teachers in other secondary schools, teachers' sense of efficacy in these sites does not decline at age 40. In addition, the variance among teachers' efficacy scores is smaller at all age levels in these schools. In other words, there is a clear site level effect on teachers' sense of efficacy in sites 04, 08 and 14; that effect, we believe, can be understood in terms of the strong professional community organized and supported by school leadership in these sites.

Without these organizational supports, there is little or no systematic response to today's students; instead individual teachers adapt according to their own values, understandings and expertise. In most public schools, consequently, today's students experiences "school" as a much less consistent environment than did yesterday's.

III. Students' Perspectives on Teachers and School

Students' voices seldom are included in assessments of the school workplace or classroom. However, as "co-constructors" of school and classroom environments, students' perspectives are critical to an analysis of what goes on in schools. Consequently, a major focus of the Center's research program is developing a comprehensive understanding of schools and classrooms from students' points of view. This section reports findings from the centers' research involving students.¹⁶

Most all students--both low and high achieving--express a desire to learn and to do well in school. They want to have good relationships with their teachers, to be actively involved in the learning process and to feel comfortable and at ease in the overall school environment. Students are perceptive, articulate and opinionated about school and classroom environments.

Classroom Environments

The class I'm getting an 'F' in, he, to me seems like, he doesn't really actually pay attention to anybody in particular in class, it's just a whole class, and this is math, but...I don't know what he really actually means. He doesn't look at me.... (RA52STB:1258-1266)

While students appreciate a well organized and orderly environment, they do not like one where the teacher is detached and treats the classroom as a whole rather than as a roomful of individuals. Students of all achievement levels say they like classrooms where they feel they know the teacher and the students around them. They want teachers to recognize who they are, listen to what they have to say and respect their efforts. In classrooms where personalities are allowed to show they respond more fully both academically and personally.

This is, perhaps, part of the reason why the majority of students we interviewed prefer classes with their friends. Having others nearby whom they know, trust, and can depend on to help them is extremely important. Some students say their level

¹⁶ The Center's Study includes 54 students (selected for diversity with respect to gender, achievement level and ethnicity) in four comprehensive high schools in two California school districts. These students are being followed for a period of two years. Analysis of student record data and repeated interviews and observations are methods being used to identify factors which impact students' engagement with schools and learning.

of participation depends on the number of friends in a class--the more friends there are the more they are involved.

It also helps if you know people in the class real well. Cause if you don't know anybody you're sort of just doing your work and you're more like--less interested. If you can talk to somebody about it, maybe make comments or something it's easier to get through the class than if you don't know anybody. (RA35STA:495-503)

For other students, having friends in a class is so important that they decline to transfer to higher level courses. For example, one student assigned to a low-track English class was encouraged by her counselor to move to a regular academic track. Although she is well aware of the long-term benefits that could be derived from the transfer she refused because her friends are in the lower track.

Students also identify emotional safety in the classroom environment as important. Although students say that they like to be challenged substantively, they do not like a classroom where they are put down or made to feel stupid, either by the teacher or their peers.

I like when they explain things more, if you have a question I don't like teachers that go, 'No we explained it once and that's it.' A lot of teachers are like that, they explain it once and they won't do it again. (OR06STA:188-193)

Students are clear about classroom features which increase their involvement in learning. They also talk specifically about teacher attitudes and behaviors and pedagogical methods which support and promote optimal learning environments for them.

Relationships with Teachers

Its mostly the way that the teachers treat you as a student--or as a person actually. Because sometimes they're just like, 'here's the work.' Do this. ...and it's not really good because people are just, like, there. (OR09STA:341-349)

A recurring theme in our interviews is the high value students place upon teachers whom they perceive as caring. However, there are differences in the way high and low achievers define caring behavior. High achieving students often describe actions associated with assistance in academic matters as indicative of caring teachers. Direct interaction, therefore, is not always necessary. For example, caring can be expressed by a teacher who takes the time to carefully read and critique a paper.

They listen real well. And the teachers, they encourage you for good grades, like if you write a good essay, they write a lot, you know, 'good job' or 'a lot better,'. And it helps a lot. And I started writing better since I came here. More consistent. (ES47STA:175-183)

For high achieving students, caring is demonstrated by willing assistance with academic tasks. Such help demonstrates that teachers are aware of and concerned about helping them meet long-term educational goals.

For low achieving students, teacher personality characteristics (e.g., patience, humor, tolerance, ability to listen) and person-to-person academic assistance are central to caring behavior. Low achieving students express frequently a preference for direct, personal interaction.

Miss Ashton, she'll go all off on the board and she'll tell you, you know 'If you think you can't even spell this word, think you're going to go in the English class next year?' And then she'll say, well, she'll talk to you. She won't put you down, she'll talk to you and she'll go 'Yeah, you know I love you. You know I want you to make something out of yourself, so stop messing around in class.'
(RA27STB:1526-1537)

For low achieving students, caring means the expression of interest and concern that goes beyond assistance with academic endeavors to affirm explicitly their value and worth.

Students also mention humor, openness and consideration as important teacher qualities that serve to bridge age and status barriers and connect students with adults in school environments. For example:

Some teachers like they'll tell you stories about things that have happened to them and you'll kind of relate to them in that way. (ES37STA:295-297)

...teachers here need, oh I don't know, to open up more, share their feelings with the students. You know they seem like they're a recording or something when they talk to you.
(VA22STA:942-948)

[I like it] when they tell you stories about their families. When they make jokes and they kind of like tease. Mostly telling experiences --joking. (VA16STA:665-670)

Openness, however, does not necessarily mean revealing information about one's personal life. Rather, it is communication which lets students know that teachers have thoughts, feelings and experiences which both enliven and go

beyond the academic content of the classroom. For example, students respond positively to teachers who exhibit feelings and emotions associated with subject matter and draw on their own experiences to supplement course content.

Both high and low achieving students also talk about their appreciation of teachers who are considerate--who treat them with respect and are attuned to their needs. For example, one student noted her appreciation of a favorite teacher's efforts to coordinate her tests so students didn't have four other tests on the same day. Alternatively, students express frustration that teachers frequently do not understand the multiple pressures they feel--academic, social and emotional.

In general, students characterize teachers as those who "like students" and "like to teach" and those who don't. They know that some teachers would rather not be teaching and they describe others who act as if they don't like teenagers generally.

She's always smiling and she doesn't yell or anything. And she's always nice to us. She shows us how to do things.
(CR01STA:133-137)

In contrast:

I don't like my band teacher very much cause he is kind of--he acts like he doesn't want to teach. He just goes for the paycheck. (VA18STA:137-142)

Over and over again students have told us that "a certain teacher can really make a difference" and that their relationships with teachers is a key to their academic engagement.

It makes a difference (if I like a teacher) on how hard I work on my homework cause like, if I don't like them very much I go 'ok, it's not really worth it.' But if I do, then I say, 'yeah, I'll try harder' and I try some of the stuff.
(ES47STA:279-284)

Teacher attitudes and behaviors affect how students feel as well as how they perform. For example, student accounts and classroom observations surface a variety of counterproductive consequences when students perceive teachers as uncaring, discontented with their work and/or disdainful of adolescents generally. In some cases, students are compliant--they do what is expected but remain distant both from the teacher and the learning process. This pattern is true frequently for high achieving students who do the work required to maintain their grades but are not actively engaged in the subject area content. In other cases, students act defensive--"if you don't like me, I'm not going to

like you"--and proceed to behave in disruptive and disrespectful ways. Still other students withdraw quietly--from the classroom, the teacher, other students and academic endeavors generally.

Pedagogy

I want to feel like I'm really being educated rather than just memorizing facts and forgetting them the next day. I'm not learning anything by that. (OR07STA:152-156)

Perhaps the most passionate comment that emerged in discussions with students about pedagogy is that they want to learn from teachers, rather than simply read textbooks. Students unanimously talk about their dislike of reading textbook chapters and answering end-of-chapter questions.

I think if the teacher does something more than just taking things out of the book or something. ...Its really boring if it's just out of the book. If she includes the students in everything I think that's really fun. (RA34STA:128-132)

...Like what I was thinking about my science teacher, he never does anything new and it's just all by the book, you just read your chapter, you go on and do the questions. And it's not very interesting and he doesn't explain about it much. (RA35STA:373-377)

Teachers who depend on lecturing as a primary pedagogical method also risk alienating students who are quick to distinguish between teachers who talk with them and those who talk at them.

It's like a teacher preaches to the class, the class is falling asleep, and you're not really getting the work. (RA33STA:637-642)

... when you go into a classroom and the teacher is going through a process, a study process, as if all the variables are already accounted for. And nothing will change within this process and if something does then we can just ignore it and keep going on head first. And it's kind of a daily chore that's not really enjoyable. It doesn't give you anything--all it does is take away. (OR05STA:393-403)

Students of all achievement levels say they prefer teachers who draw them into the learning process by asking higher-order questions and by facilitating class discussions. Most important is teachers' creation of a safe, respectful classroom environment for these interactions. The following student comment makes this point vividly:

She makes the class feel comfortable talking about themselves and really expressing their feelings. Like if

you read something and everyone interprets it differently, she wants to hear everyone's opinion. And everyone gets a chance to say how they feel...you really learn a lot. You learn different points of view and how to analyze different things. ...It's not just memorizing facts and then spitting them back to the teacher. It's really learning about how the piece you read affects you personally, how it applies to your life. And that is something that has just opened up doors to me. It's the greatest. (OR07STB:1035-1054)

Interviews and observations suggest that textbook teaching and lecturing are not infrequent methods of teaching. Students respond in different ways. High achieving students seem to "grit their teeth" and comply with teacher expectations--low achieving students more frequently withdraw and fail to meet academic demands (e.g., homework completion). For some, the belief that education is irrelevant to their lives is substantiated.

In addition to students' preference for dynamic pedagogy and an active student role, they prize teachers who are willing and able to assist them in understanding the material, who take the time to explain concepts and ideas carefully and thoroughly, and who demonstrate a commitment to help them learn. Students prefer teachers who leave room in the schedule for guided practice, questioning and the exploration of ideas.

...they just want to see if you can do it on your own, but really, even if you can do it on your own, you want a little guidance to make sure that you're doing it right.
(OR08STA:90-94)

...some teachers they just give you the work and make you do it and stuff. But not Ms. Johnson, she explains. She goes through it with you. (VA19STA:148-151)

Students say that these opportunities give them confidence that they can do their work and will be able to complete it successfully at home.

When students do not understand the material and find the teacher unapproachable, they feel frustrated and discouraged. Some are brave enough to persist in asking questions. Others are fearful of revealing their inability to comprehend.

If a teacher's moving too fast or just doesn't cover the material that I'm having problems with, it just flies right over my head. ... So I'm a real slow learner but once I get it, I'll do the best I can to be the best. So if a teacher is going over some material and I have no clue what's going on and they zoom past it, I'll be totally lost.
(OR07STA:945-962)

Consistent with their preference for an active student role, students express a strong preference for working in groups. They say that group work helps them to generate ideas, provides a vehicle for getting to know other students, and allows them to participate actively.

Where there's more than just you participating, when it's the teacher participating with you and the students participating with you--anyone participating with you, it becomes interesting because you learn something about that person. (OR05STA:416-422)

I like when you work in groups in classes and you're not always like by yourself. I like working in groups, you get more ideas, you don't like just dig them up, more ideas are going around. (OR06STA:178-183)

The one exception to enthusiasm about group work is raised by some high achieving students who explain that they end up not only doing their own work but that of less motivated students as well. In cases where mixed ability students are instructed to work together and there has been no training in group participation skills, high achieving students sometimes feel exploited. When mixed ability individuals have been trained to use cooperative learning techniques, students report a high level of involvement as well as enjoyment in the learning process.

School Environments

To date, school climate has been described almost exclusively from the perspective of teachers. For example, collegiality, principal leadership and teacher morale are measures used to characterize the school as a workplace. However, schools are also workplaces for students. And not surprisingly, we find that students are very much aware of and sensitive to the overall ambience of school environments.

Students identify a range of factors which comprise "student measures" of school climate--for example, visibility and accessibility of the principal, the collective message and level of support they receive from teachers and staff, perceived degree of safety, types of interactions between student groups, availability of extracurricular activities, mechanisms for student input into decisions and the general condition of school facilities. In addition, ESL students mention freedom to speak their native language in informal settings and access to at least one adult with whom they can communicate.

Differences in school climate are described most graphically when students have attended more than one high school or when they see their middle school as having a very different

climate. One young woman who recently moved to California paints a strong contrast between her former school setting and her new school:

They didn't really care if you were in the classroom, they didn't care what you were doing ... only one teacher in the high school had a personal thing with any of the students. It was a very large school, maybe that's why, there were real large classes, but they were very distant from everybody so, they didn't know me. I could have done anything. They had no idea who I was.

I did very bad in that school. I came here and I was failing. It was so easy not to do anything. I mean it was well, they don't care so why should I.

And then I got here and the teachers that I met, the first day they had my name right. 'Wow, this is cool,' you know who I am. I was tardy to class once, a couple of minutes late and that day they called my house to talk to my parents.

Oh this is great. ...You go in and you're not there for a day and they notice and they say, 'hi' are you tardy, and they care. (OR02STA:73-145)

For this student, and others, school climate appears to be important--not only in terms of affecting how students feel about school but how well they perform academically.

Inter-Group Relationships. An important aspect of school climate for students is the underlying level of tension emanating from peer interactions. For example, do students feel physically safe or do gangs, weapons and the fear of overt violence dominate their thoughts as they move from class to class? Is there a feeling of good will and a general openness between people of different backgrounds and in various peer groups? Or are students suspicious and hostile towards those who are different than themselves? Finally, are boundaries between groups fluid--allowing students to move easily and interact casually with varieties of other young people? Or are boundaries rigid--making in-group cohesiveness dependent upon out-group condemnation?

Students' descriptions of peer interactions reveal an astute awareness of the tacit dimensions of daily contact which create comfort and safety or alternatively, anxiety and stress. For example, students who are bused speak frequently of high schools in their home neighborhoods where the environment is viewed as hazardous and unsafe.

I was just so glad when I got out of there (my old high school). Too much violence for me. It's a good school academically but the students, most of the students they're different--like the gangs, there's a lot of it.
(VA17STA:432-437)

Students are outspoken about conditions that threaten their physical safety. However, there are other school environments where violence is not overt but an underlying level of tension and hostility permeates the air. For example:

Yeah, nothing like really physical has happened but it's gotten to the point where it's been pretty tight. But you just kind of work your way out of it. (ES37STA:585-588)

And in some cases, tension generates fear:

...like it's just kind of there (discomfort)--it's not overly looked at or seen, you just recognize it, yeah it's there...not as smooth. Because like when you hear like 'well he got me mad, I'm going to his house tonight,' and you come back the next day and 'yeah we keyed his cars' and so great--I've got to walk around and try not to make one of these guys mad, so if I do he'll--if they find out where I live I'll be terrorized. (ES37STA:540-558)

In these environments, students are uneasy and watchful. They believe frequently that the worry and anxiety they feel is unobserved by teachers and other adults.

I don't really mess with the Hispanic kids because most of them are--I can't talk to them--most of them seem pretty cool. But, it's stupid to mess with them because you don't know what kind of people they are, like they could hurt you actually if you don't know them. You don't know what they're about--so best not to mess with them.

This student's statement reflects a weariness and fear of others. What might happen if you "mess with them" is ambiguous. Further, in order to avoid "messing with them," this student must expend energy on averting situations where contact might occur. In this school environment, emotional (and physical) safety is measured by one's ability to avoid certain people and situations.

Students are extremely sensitive to nuances in the environment and they learn to adjust accordingly. "You just learn to live with it and not let it bother you," said one student as he talked about the tension between groups. Nevertheless, the implicit level of tension or ease generated by group interactions (both verbal and non verbal) has a powerful affect on the overall tenor and climate of school environments.

Boundaries and Movement Between Groups. In almost all schools student segregate themselves, at least to some extent, by ethnicity. There are other student groups as well--nerds, preppies, punks, stoners, trendies, bops, skinheads, socials, heavy metallers, etc. However, the rigidity of the boundaries between groups are experienced variously. In some cases boundaries are fluid and students move among groups with ease. For example, in one of our comprehensive high schools which serve a significant number of ethnic minorities as part of the district busing program, an African American student is easily approached by a white friend as he mixes with other Black students at lunchtime. In this type of environment, students describe everybody as getting along (for the most part) and they see few differences between students who are bused and those who are not.

...the whites hang out with everyone, and the Blacks and the Mexicans and there's Chinese--everyone hangs out together. Everyone gets along. ...I have lots of good friends that live in SE (bused students)...everyone hangs out together. (OR06STA:449-461)

...they all mix together, that's what I really like about it. It's not really just--all whites, all the Filipinos, all ...it's not like that, its like everybody mingles altogether. (OR08STA:379-383)

In this setting boundaries are crossed with relative ease as students move back and forth between groups. Most important, students in other groups are perceived as benign.

Not everybody's in a group but, like me--I ...if my friends come up to me I'll just talk with them and stuff and then they'll leave and somebody else will come up to me... (VA17STA:494-498)

Lots of people, most people just walk around to whoever they want, cause they have friends in all different kinds of groups and they, you know if they want to come over and talk to someone else they do. So it's not really that hard to move into a different group, if you have some friends in there. (ES47STA.493-502)

For these students, interaction between groups is seen as easy and unproblematic. Although students tend to hang out with their friends, tension and fear do not inhibit mingling with others.

In other school environments, boundaries between groups are rigid and students keep a distance from those they feel are different from themselves.

I only hang around with Vietnamese because hanging around with Vietnamese makes me feel like I'm a part of them and

they know how I feel and I can speak...but then when I hang around with Americans sometimes you know, we don't get along because I'm Vietnamese and they're American. (ES48STA:416-425)

Students relate the ease with which they can traverse peer group boundaries to their overall feeling of well-being. When boundaries are rigid and impenetrable, students are more likely to attribute negative stereotypes to others and define them as outsiders. They prefer a school community where everyone is perceived as a part of the whole--where differences are valued rather than feared.

Peer Behaviors. Students also talk about the effect that the general behavior of their peers has on the school atmosphere.

Well a lot of times they (other students) can make the faculty pretty ornery. Just because the faculty's tired--especially the library staff--I guess the ladies are nice. I don't know them, but they seem to be always kind of on the verge of getting mad because people (other students) come in here and abuse it. (ES37STA:632-638)

For the most part, students dislike disruptive behaviors; they believe that it negatively impacts the quality of their own school experience. They are most comfortable in environments where people's actions are predictable and where values and beliefs about acceptable behavior are shared.

...if they just don't want to learn we don't want them here at all, cause the security guards are doing the job of keeping them in class but I think they're tired of that--so why don't they just let them go? If you don't want to learn nothing you might as well get off the campus...And don't mess around with the people that want to learn...we have a gangster group in my class and sometimes they try to keep the other students from learning and they try to get the teacher's attention and the teacher gets really mad. (VA143TA:881-900)

Students want adults in school environments (teachers and administrators) to enforce acceptable standards of behavior.

Indeed, students generally want many of the same things that teachers want in the school setting: A safe, orderly environment, an active role in learning, respect from others. This agreement among students and teachers on broad features of the school level environment suggests that the tensions between students and teachers reported here and in the preceding section on teachers' perspective has less to do with disagreement on general goals or qualities of school, than in the ways chosen to realize them.

IV. Issues for policy

Issues of district and site level support for teachers' efficacy, morale, collegiality and professional community pervade this year's analyses. Our data illustrate the many policy decisions and choices district and school administrators make that influence conceptions of teaching and learning in secondary schools, and the sense of competence and optimism teachers and students bring to the task. In all of the secondary school settings in our sample, we saw that the ways in which leaders think about and approach such issues as collaboration, teacher/student assignments, problem-solving, or communication have fundamental consequences the accomplishments and attitudes of teachers and students.

These general policy matters are focused and made especially immediate and salient by the troublesome finding that a significant number of teachers in public high schools feel that they are unsuccessful in meeting difficult, complex challenges by today's students. While, some of today's students are better prepared, more highly motivated, and a source of professional pleasure and pride to their teachers, most public school teachers face students in some or all of their classes whom they perceive as "non-traditional" or problematic for one or more reasons--dysfunctional families, substance abuse, exposure to violence or crime, teen pregnancy, limited English proficiency, diverse cultural backgrounds, competing demands of jobs or family.

Teachers have witnessed rapid and enormous changes in their students over the course of their careers. Students aren't like they "used to be", and teachers in large numbers feel they are not doing a good job meeting the educational needs of today's students. Some teachers blame the students for the failure; some blame the system; some blame themselves. These teachers and their students present a fundamental and urgent dilemma for policy: How can policy reach into the classroom to enable the success of today's teachers and their students?

The classroom, our data show, is the appropriate unit of analysis and target for intervention. Teachers' sense of efficacy or competence is not a stable trait; it varies on a class by class basis. But this reality does not leave policy lost in a swamp of particularism. Our data also reveal systematic effects of district and school level practices and policy choices on teachers' sense of efficacy and suggest promising opportunities for policy at both district and school levels.

At the site level, critical areas for policy involve information and organizational structures. Few sites have adequate mechanisms in place for teachers and students to talk together, for teachers to share information. Both students and

teachers, our research shows, want much the same thing from school. A primary obstacle to effective or positive teacher/student interactions is lack of information or misinformation. In particular, teachers often misinterpret student behavior, seeing fear as aggression or fatigue as apathy. Accurate information about students' needs, interests and perspectives is an important component of a strategy to enhance teachers' sense of efficacy. Information about students also is elemental to the caring, respectful relationship students seek with their teachers. Our research shows that students as well as teachers are the street level bureaucrats who determine the outcomes of policies. Why does an attendance policy not work, for example? Students have important information about why policies succeed or fail to meet their objectives.

Another critical dimension of a site-level response is the availability of structures and norms of collaboration and collective problem solving. We have seen that teachers able to work together in teams, as a department, as part of a task force, as a study group, or as a whole faculty to develop solutions to the challenges of today's students also are teachers with a higher sense of efficacy and professional support. Further, both school leaders and faculty display a high level of tolerance for "ad hoc-racy", or flexible, situation-specific solutions in schools with a strong professional community. Agreed upon norms, values and expectations permits deviation from "the rules" or standard procedures. The lack of such structures for collective responsibility in the secondary school setting and norms of problem solving signals weak professional community. Isolated teachers must cope as best they can without organizational or collegial supports.

Our research also points to micro-policies that influence teachers' sense of efficacy, willingness and ability to respond effectively to today's students. For example, teacher assignment policies are key influences on how teachers feel about their work. Teachers' morale and confidence is enhanced by assignment policies that endeavor to "match" teachers and classes, or at least distribute difficult assignments equitably; it is diminished in settings where teachers' assignment is framed as primarily management problem, rather than a professional issue. "Match" or classroom choice also is critical for students, but too often ignored in computer-generated class assignments. Teacher and student assignment affords an important, strategic context to enable teaching and learning.

These school level considerations have district-level analogues and implications. An important and unexpected finding of this year's research is that the district matters to teachers' sense of efficacy. The professional community created at the district level and active district support for teachers' professionalism enhanced teachers' sense of efficacy in the

classroom. This finding cautions policymakers and practitioners promoting various forms of school restructuring to acknowledge that even a so-called "restructured" school requires a supportive central office and a coherent district-level professional community.

In addition to supporting a strong professional community, districts can play a key role in providing professional development opportunities. Teachers and administrators alike express frustration at "not knowing what to do"--how to respond to today's culturally different, socially different, normatively different student. This critical need is best met at the district level. Teachers and administrators are clear about what kinds of assistance would be most useful. Traditional [or even innovative] "human relations" programs get low marks, as do other conventional staff development approaches. Most useful, site level educators say, is support for networks, observations, and other forms of sharing experience. These experiences provide "usable knowledge" as well as opportunities for teachers and administrators to learn how to diagnose the technical teaching problems and techniques for responding to them.

Certainly, a central component of the knowledge teachers say they need concerns instructional practices. But another important element has to do with the non-academic aspects of the school setting. School, for many of today's students, provides the social support and context for interactions formerly provided by family or community. Both students and teachers tell us that these non-academic aspects of school often are more important than the academic purposes of school, as the adults and the institution itself provide some of the only stability and support in many adolescents' lives. Many administrators and teachers acknowledge the importance of dealing with the "whole child" in today's secondary school, but feel ill-equipped to do so.

Another issue for district level policymakers concerns training and supports for site administrators. Leadership, our data show, is a critical determinant of school professional culture and so of teachers' willingness and ability to construct effective practices for today's students. District administrator training sessions, administrator evaluation procedures, consultants and technical assistants are resources district could use to promote and support the kind of site level leadership we have seen to be essential for a strong school community.

Policymakers at all levels need to take a hard look at the constraints that policy imposes on teachers' ability to respond to today's students. In particular, many of the students presenting the greatest challenges to teachers also are students who are targets of more than one district or state policy aimed to promote equity objectives. Teachers in all our secondary school sites point to instances of conflicts among these

objectives that further disadvantage students, in their view. Most prevalent in California districts was the complaint that busing schedules made it extremely difficult for teachers to spend needed additional time with low achieving students now taking college preparatory level classes as required by new core curriculum guidelines.

Additional constraints, many teachers report, are found in the prescriptive nature of some curriculum guidelines and requirements. These prescriptions limit teachers' flexibility to identify materials that suit their students or to innovate in areas of instructional practice that compete with "coverage" pressures. While teachers do not necessarily quarrel with the "excellence" objectives of new state or district policies, they believe that these policies attend insufficiently to consequential classroom level differences.

The social and demographic changes in secondary school classrooms have been rapid and profound. Our observations and interviews in diverse high school settings document the difficult and complex demands placed upon teachers in the 1990s. Our research also makes it clear that getting better at promoting student learning and engagement with school is not just (or even) a question of trying harder. Teachers and schools are not well-equipped to respond to today's student and are inadequately supported in efforts to do so. Neither superficial policy responses nor more of the same will do. The tough policy issue lies in devising ways to support and enable the classroom teacher to meet successfully and daily the challenges of today's classrooms.

Further, the troublesome issue of diminished sense of efficacy among a substantial number of today's teachers calls for attention to the balance of current policy initiatives. The problem of older (age 40 and over) teachers ill-prepared to work with today's students will be with us for at least 10 to 15 years. While reforms in areas such as teacher credentialling, licensure, and preservice education hold promise as ways to enhance the quality of new teachers, the skills, attitudes and practices of teachers already in the teaching force are equally key to the outcomes of the nation's schools in both the near and mid-terms.

TECHNICAL APPENDICES

APPENDIX 1

SURVEY MEASURES OF SCHOOL CLIMATE AND PROFESSIONAL COMMUNITY VARIABLES

Survey items used to construct each scale relevant to this report are listed according to item numbers in the CRC 1990 Teacher Questionnaire. In parentheses we report the numbers of identical items in the Teacher Questionnaire used in the 1984 ATS national survey (part of the High School & Beyond Program conducted by the National Center for Educational Statistics).

I. ORGANIZATION CLIMATE

A. Principal Leadership (13-item scale: range 13-78)

CRC #12 (ATS #19). Using the scale provided, please indicate the extent to which you agree or disagree with each of the following statements:

e (i). The principal does a poor job of getting resources for this school (6 points)

f (j). The principal deals effectively with pressures from outside the school that might interfere with my teaching (6 points)

g (k). The principal sets priorities, makes plans, and sees that they are carried out (6 points)

i (m). Goals and priorities for the school are clear (6 points)

k (o). Staff members are recognized for a job well done (6 points)

m (q). Staff are involved in making decisions that affect them (6 points)

p (r). The principal knows what kind of school he/she wants and has communicated it to the staff (6 points)

q (s). The school's administration knows the problems faced by the staff (6 points)

r (t). In this school, I am encouraged to experiment with my teaching (6 points)

t (w). The school administration's behavior toward the staff is supportive and encouraging (6 points)

cc (hh). The principal lets staff members know what is expected of them (6 points)

dd (jj). The principal is interested in innovation and new ideas (6 points)

ff (y). The principal usually consults with staff members before he/she makes decisions that affect us (6 points)

B. Collegiality (5-item scale: range 5-30)

CRC #12 (ATS #19). Using the scale provided, please indicate the extent to which you agree or disagree with each of the following statements:

a (d). You can count on most staff members to help out anywhere, anytime--even though it may not be part of their official assignment (6 points)

u (x). Teachers in this school are continually learning and seeking new ideas (6 points)

y (dd). There is a great deal of cooperative effort among staff members (6 points)

z (ee). Staff members maintain high standards (6 points)

bb (gg). This school seems like a big family, everyone is so close and cordial (6 points)

C. Teacher Influence over School Policy (3-item scale; range 3-18)

CRC #9 (ATS #1). How much influence do teachers have over school policy in each of the areas below:

a (a). Determining student behavior codes (6 points)

b (b). Determining the content of inservice programs (6 points)

d (d). Establishing the school curriculum (6 points)

D. Control over Classroom Instruction (4-item scale; range 4-24)
Note: Figure 7 in text uses only item b of this index.

CRC #9 (ATS #2). Using the scale provided, how much control do you feel you have in your classroom over each of the following areas of your planning and teaching:

a (a). Selecting textbooks and other instructional materials (6 points)

b (b). Selecting context, topics, and skills to be taught (6 points)

c (c). Selecting teaching techniques (6 points)

e (e). Determining the amount of homework to be assigned (6 points)

E. Goal Consensus (2-item scale; range 2-12)

CRC #12 (ATS #19). Using the scale provided, please indicate the extent to which you agree to disagree with each of the following statements:

b (e). Most of my colleagues share my beliefs and values about what the central mission of the school should be (6 points)

i (m). Goals and priorities for the school are clear

F. Department Identification (2-item scale; range 2-12)

CRC #12 (no ATs item). Using the scale provided, please indicate the extent to which you agree to disagree with each of the following statements:

n. My closest colleagues are members of my department (6 points)

x. Teachers here identify more with their department than with the school as a whole (6 points)

G. Job Satisfaction (2-item scale; range 2-12)

CRC #18 (ATS #32). How much of the time do you feel satisfied with your job in this school?

1. Almost never
2. Some of the time
3. Most of the time
4. All the time

CRC #12 (ATS #19). Using the scale provided, please indicate the extent to which you agree to disagree with each of the following statements:

aa (ff) I usually look forward to each working day at this school (6 points)

II. TEACHER-STUDENT RELATIONS

A. Personalization (2-item scale; range 2-12)

CRC #12 (no ATS items). Using the scale provided, please indicate the extent to which you agree to disagree with each of the following statements:

w. I get to know most students in my classes fairly well (6 points)

o. I get to know many students who are not in my classes (6 points)

B. Teacher Efficacy (6-item scale; range 6-36)

CRC #8 (no ATS item; replicates NELS:88 item). On the scale below, indicate the extent to which you agree or disagree with each of the following statements:

a. If I try really hard, I can get through to even the most difficult or unmotivated students (6 points)

b. I feel that it's part of my responsibility to keep students from dropping out of school (6 points)

c. If some students in my class are not doing well, I feel that I should change my approach to the subject (6 points)

d. By trying a different teaching method, I can significantly affect a student's achievement (6 points)

e. There is really very little I can do to insure that most of my students achieve at a high level (6 points)

f. I am certain I am making a difference in the lives of my students (6 points)

III. PROFESSIONAL COMMUNITY (New CRC Indices)

A. Job Variety (4-item scale; range 4-24)

CRC #17. Please indicate the extent to which you agree or disagree with each of the following statements as descriptions of your teaching job and practices. (Circle one for each item)

b. In my job, there is something new happening every day (6 points)

e. In my job, I follow the same teaching routines every day (6 points)

h. One thing I like about my job is the variety of work
(6 points)

k. My job tasks are the same each day (6 points)

B. Teacher Learning (4-item scale; range 4-20)

CRC #3. Thinking back over the current school year, how much progress do you feel you have made in each of the following areas? (Circle one number on the scale for each area.)

a. Increasing my subject area knowledge (5 points)

b. Working with the students I teach (5 points)

c. Increasing skills in teaching my subject matter
(5 points)

d. Assessing the quality of my teaching (5 points)

C. Professional Development Opportunities Taken (11-item scale; range 11-55)

CRC #4. To what extent has each of the following been an important source of personal and professional growth for you?

a. Your own experiments with curriculum or teaching
(5 points)

b. Collaboration with other teachers (5 points)

c. Formal course work in a college or university
(5 points)

d. School or district inservice offerings (5 points)

e. Working on special projects (5 points)

f. Independent reading or writing (5 points)

g. Professional conferences (5 points)

h. Informal contact with colleagues (5 points)

i. Seeing others teach (5 points)

j. Being observed by other teachers (5 points)

l. Professional association activities (5 points)

D. Standardization through Curriculum and Examinations (5 item scale; range 5-30)

CRC #17. Please indicate the extent to which you agree or disagree with each of the following statements as descriptions of your teaching job and practices. (Circle one for each item)

- a. If another teacher took over the courses I teach, the basic content would stay the same (6 points)
- f. It is important for me to cover the curriculum for my courses (6 points)
- g. I make a conscious effort to coordinate the content of my courses with other teachers (6-points)
- j. I am familiar with the content and specific goals of the courses taught by other teachers in my department (6 points)
- m. Teachers in my subject area department work together to develop common exams for particular courses (6 points)

E. Coordination and Control Through Ongoing Evaluation (3-item scale; due to different scaling of the items, this index is the sum of teacher z-scores for each item)

CRC #2. For the most recent full school week, please indicate how much time you spent outside regular classroom teaching hours on each of the following school-related activities. WRITE IN AMOUNT FOR EACH LINE (if none, write 00).

- d. Meeting with other teachers on lesson planning, curriculum development, guidance (Minutes)

CRC #12. Using the scale provided, please indicate the extent to which you agree or disagree with each of the following statements about working conditions in your school. (CIRCLE ONE FOR EACH ITEM).

- j. The staff seldom evaluates its programs and activities (6 points; reverse coded)

CRC #17. Please indicate the extent to which you agree or disagree with each of the following statements as descriptions of your teaching job and practices. (Circle one for each item)

- i. My colleagues judge the quality of my teaching on the basis of my students' achievement gains (6 points)

F. Teacher Morale (13-pt scale; range 13-91)

CRC #15. Please indicate on the scale below how strongly you feel, one way or the other, about specific conditions of your current teaching job. (Circle one for each job dimension listed) [1 = "extremely negative"; 7 = "extremely positive"]

- a. My teaching salary (7 points)
- b. My benefits package (7 points)
- c. Material resources for my teaching (7 points)
- d. Teachers' professional standing in the broader community (7 points)
- e. Extent of parents' support of my work (7 points)
- h. Extent of support I receive from site administrators (7 points)
- i. Extent of support I receive from school colleagues (7 points)
- j. Time demands of my job (7 points)
- k. Opportunities to participate in decisions affecting my work (7 points)
- l. The courses I am assigned to teach (7 points)
- m. The students I am assigned to teach (7 points)
- n. Opportunities to collaborate with school colleagues (7 points)
- o. Opportunities for professional development (7 points)

G. Job Satisfaction Subscales: Based on CRC #15 (see wording for Teacher Morale above)

- a. Professional Support in School (5-item scale; range 5-35)
 - h. Extent of support I receive from site administrators (7 points)
 - i. Extent of support I receive from school colleagues (7 points)

- k. Opportunities to participate in decisions affecting my work (7 points)
 - n. Opportunities to collaborate with school colleagues (7 points)
 - o. Opportunities for professional development (7 points)
- b. Assignment (Courses and Students) (2-item scale; range 2-14)
 - l. The courses I am assigned to teach (6 points)
 - m. The students I am assigned to teach (6 points)
- c. Time Demands of Job (1 item; 7-point scale)
 - j. Time demands of my job (7 points)
- d. Economic and Social Status (3 -item scale; range 3-21)
 - a. My teaching salary (7 points)
 - b. My benefits package (7 points)
 - d. Teachers' professional standing in the broader community (7 points)
- e. Parent support (1 item; 7-point scale)
 - e. Extent of parents' support of my work (7 points)

APPENDIX 2

SUMMARY OF SURVEY FINDINGS FOR CALIFORNIA AND MICHIGAN CRC FIELD SITES

| | | CRC SURVEY, 1990: CALIFORNIA SITES | | | | | | | | | | NATIONAL SURVEY (ATS), 1984 | | |
|------|--|------------------------------------|---------------|----------------|----------------|----------------|----------------|----------------|-------------|---------------|----------------|-----------------------------|-----------------------------|---------------|
| | | PUBLIC | | | | | | | INDEPENDENT | | | PUB. | INDEP. | |
| | | 01 | 02 | 03 | 06 | 07 | 08 | 10 | | 05 | 09 | 04 | mean (s.d.) | mean (s.d.) |
| I. | SCHOOL CHARACTERISTICS | | | | | | | | | | | | | |
| | Size (9 - 12 enrollment) S < 885, M 885 - 1500, L 1501 - 2075, L+ > 2075 | S | L | L | M | M | S | L+ | | S | S | S | 1289 ^a (789); | 275 (218) |
| | Grade Structure | 9-12 | 9-12 | 9-12 | 9-12 | 10-12 | 4-12 | 9-12 | | 7-12 | 7-12 | 9-12 | | |
| | Magnet (x = yes) | X | | | | | X | | | | | | | |
| | Minority % L < 10%, M 10-29%, H 30-55%, H+ >55% | H | H+ | H | H+ | H | H | M | | L | L | L | 25% ^a (30) | 9% (14) |
| | Student Achievement Rating (1 = highest; 5 = lowest) | 4.1 | 3.2 | 3.3 | 3.7 | 2.3 | 3.1 | 2.3 | | 1.4 | 1.7 | 3.8 | 3.2 | 2.0 |
| II. | SURVEY RESPONDENTS | | | | | | | | | | | | | |
| | N 1990 | 25 | 38 | 44 | 40 | 45 | 31 | 121 | | 32 | 30 | 10 | | |
| | Teacher Response Rate (%) | 52% | 61% | 59% | 73% | 90% | 66% | 90% | | 86% | 97% | 91% | | |
| III. | SCHOOL CLIMATE ^b | | | | | | | | | | | | | |
| | Principal Leadership | | | | | | | | | | | | | |
| | 1989 | 51.1 (14.7) | 60.1 (9.1) | 55.0 (16.3) | 50.3 (14.1) | 59.9 (12.7) | 59.6 (12.4) | 50.9 (11.6) | | 57.8 (7.7) | 50.7 (13.8) | 61.0 (9.0) | | |
| | 1990 | 51.0 (13.7) | 63.0 (5.4) | 56.4 (13.1) | 48.5 (12.6) | 62.3 (10.1) | 63.5 (12.9) | 56.6 (11.0) | | 53.8 (9.0) | 58.2 (10.8) | 56.1 (8.0) | 50.6 (6.7) | 58.0 (6.9) |

^a The means and standard deviations are based on unweighted ATS data.

^b For each index, the mean of teacher ratings within the school is reported; the standard deviation of teacher ratings is shown in parentheses. See Appendix 1 for questionnaire items used to construct each index and point range of the scale.

| | | CRC SURVEY, 1990: CALIFORNIA SITES | | | | | | | | | NATIONAL SURVEY (ATS), 1984 | | |
|------|--------------------------------------|------------------------------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|-----------------------------|---------------|---------------|
| | | PUBLIC | | | | | | INDEPENDENT | | | PUB. | INDEP. | |
| | | 01 | 02 | 03 | 06 | 07 | 08 | 10 | 05 | 09 | 04 | mean (s.d.) | mean (s.d.) |
| III. | SCHOOL CLIMATE (cont.) | | | | | | | | | | | | |
| | Collegiality Index | | | | | | | | | | | | |
| | 1989 | 18.4 (4.7) | 19.6 (4.4) | 17.5 (5.8) | 19.0 (4.3) | 21.5 (4.0) | 21.9 (4.9) | 20.6 (4.7) | 22.8 (3.8) | 22.0 (5.5) | 24.9 (3.2) | 19.2 (2.3) | 23.0 (2.8) |
| | 1990 | 18.8 (5.0) | 20.2 (3.4) | 17.1 (5.4) | 18.5 (4.8) | 21.9 (4.5) | 22.8 (4.7) | 20.6 (4.2) | 22.3 (4.3) | 23.1 (4.8) | 24.9 (2.3) | | |
| | Teacher Influence Over School Policy | | | | | | | | | | | | |
| | 1989 | 9.9 (3.0) | 10.0 (2.5) | 10.8 (4.8) | 9.0 (3.6) | 10.6 (2.9) | 10.8 (3.0) | 10.0 (3.8) | 11.6 (3.0) | 12.0 (3.0) | 13.6 (2.1) | 10.1 (1.5) | 12.6 (2.9) |
| | 1990 | 9.4 (3.1) | 11.9 (2.5) | 10.4 (4.1) | 8.8 (3.9) | 12.0 (3.0) | 11.7 (3.2) | 10.9 (3.3) | 10.7 (3.0) | 12.5 (3.1) | 14.5 (1.7) | | |
| | Control over Classroom Instruction | | | | | | | | | | | | |
| | 1989 | 21.1 (2.9) | 19.6 (3.4) | 21.0 (2.6) | 18.8 (3.7) | 19.9 (3.0) | 20.1 (3.2) | 20.3 (2.9) | 22.1 (1.6) | 23.1 (1.3) | 21.5 (3.3) | 21.1 (1.2) | 21.7 (1.3) |
| | 1990 | 20.1 (3.2) | 20.7 (2.8) | 20.4 (2.76) | 19.5 (3.3) | 19.7 (3.6) | 19.7 (3.0) | 20.0 (2.9) | 21.3 (2.1) | 23.1 (1.35) | 22.9 (2.5) | | |
| | Goal Consensus Index | | | | | | | | | | | | |
| | 1989 | 6.0 (2.3) | 8.3 (1.5) | 7.3 (2.4) | 7.8 (2.0) | 9.1 (1.8) | 8.2 (2.4) | 8.2 (2.3) | 8.0 (2.0) | 8.7 (2.2) | 10.0 (1.6) | 8.0 (.9) | 9.1 (1.3) |
| | 1990 | 7.2 (2.1) | 8.9 (1.2) | 7.4 (2.2) | 7.4 (2.1) | 9.1 (1.9) | 9.2 (2.6) | 8.9 (2.0) | 8.3 (1.7) | 9.1 (1.9) | 10.4 (1.4) | | |

| | | CRC SURVEY, 1990: CALIFORNIA SITES | | | | | | | | | | NATIONAL SURVEY (ATS), 1984 | | |
|-------------------------------|---------------------------|------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|--|---------------|---------------|-----------------------------|-------------|-------------|
| | | PUBLIC | | | | | | INDEPENDENT | | | | PUB. | INDEP. | |
| | | 01 | 02 | 03 | 06 | 07 | 08 | 10 | | 05 | 09 | 04 | mean (s.d.) | mean (s.d.) |
| III. | SCHOOL CLIMATE (cont.) | | | | | | | | | | | | | |
| | Department Identification | | | | | | | | | | | | | |
| | 1989 | 8.9 (2.4) | 7.6 (2.6) | 6.7 (2.7) | 7.8 (2.8) | 8.3 (2.3) | 7.4 (2.9) | 9.6 (2.4) | | 8.1 (2.1) | 6.7 (2.9) | 4.2 (2.7) | NA | NA |
| | 1990 | 7.9 (2.5) | 7.5 (2.2) | 8.2 (2.8) | 8.5 (2.5) | 8.3 (2.6) | 7.6 (3.1) | 9.9 (2.3) | | 8.0 (2.2) | 7.3 (2.7) | 4.1 (2.1) | | |
| | Job Satisfaction | | | | | | | | | | | | | |
| | 1989 | 7.5 (2.0) | 7.4 (1.6) | 7.6 (1.6) | 7.2 (2.0) | 7.8 (1.8) | 6.8 (2.1) | 7.7 (1.6) | | 8.5 (1.3) | 7.8 (1.4) | 8.8 (1.1) | 7.3 (.6) | 7.6 (.9) |
| | 1990 | 7.6 (1.6) | 7.3 (1.7) | 7.6 (1.5) | 7.9 (1.6) | 8.2 (1.4) | 7.7 (1.7) | 7.8 (1.4) | | 8.0 (1.1) | 8.5 (1.1) | 7.8 (1.1) | | |
| IV. TEACHER-STUDENT RELATIONS | | | | | | | | | | | | | | |
| | Personalization | | | | | | | | | | | | | |
| | 1989 | 9.4 (1.5) | 7.9 (1.9) | 8.7 (2.5) | 8.9 (2.0) | 8.1 (2.2) | 10.1 (1.6) | 8.1 (2.1) | | 10.6 (1.7) | 10.7 (1.6) | 11.2 (1.3) | NA | NA |
| | 1990 | 9.2 (2.0) | 8.3 (1.8) | 8.5 (2.3) | 9.2 (2.1) | 8.7 (2.1) | 9.8 (1.7) | 7.8 (2.2) | | 9.6 (1.6) | 10.0 (1.8) | 9.4 (1.7) | | |
| | Teacher Efficacy | | | | | | | | | | | | | |
| | 1989 | 25.1 (4.5) | 26.5 (4.7) | 26.7 (6.1) | 27.0 (5.1) | 27.7 (5.2) | 27.9 (4.6) | 27.2 (3.7) | | 29.4 (3.6) | 29.3 (3.4) | 29.9 (3.0) | NA | NA |
| | 1990 | 25.8 (5.5) | 26.0 (5.0) | 25.1 (4.7) | 27.6 (5.2) | 27.1 (4.8) | 27.8 (4.7) | 26.9 (4.5) | | 27.3 (4.7) | 29.7 (4.0) | 27.2 (3.1) | | |

| | CRC SURVEY, 1990: CALIFORNIA SITES | | | | | | | | | | NATIONAL SURVEY (ATS), 1984 | |
|---|------------------------------------|---------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|---------------|-----------------------------|-------------|
| | PUBLIC | | | | | | | INDEPENDENT | | | PUB. | INDEP. |
| | 01 | 02 | 03 | 06 | 07 | 08 | 10 | 05 | 09 | 04 | mean (s.d.) | mean (s.d.) |
| V. PROFESSIONAL COMMUNITY (NEW INDICES) | | | | | | | | | | | | |
| Job Variety | 17.2 (3.5) | 16.8 (3.2) | 16.9 (3.7) | 17.5 (2.7) | 16.6 (3.3) | 18.1 (3.5) | 17.1 (3.6) | 17.5 (3.3) | 17.1 (3.1) | 18.1 (2.1) | NA | NA |
| Teacher Learning | 14.1 (2.5) | 14.1 (2.8) | 14.9 (3.1) | 14.9 (2.5) | 14.8 (2.7) | 15.1 (2.8) | 14.3 (3.0) | 15.0 (2.6) | 14.7 (2.7) | 15.1 (2.8) | NA | NA |
| Professional Development Opportunities Taken | 33.0 (7.2) | 33.7 (6.8) | 31.4 (8.8) | 33.3 (8.6) | 34.2 (8.0) | 36.0 (5.3) | 35.2 (7.2) | 34.1 (5.9) | 33.1 (7.3) | 29.4 (4.1) | NA | NA |
| Standardization through Curriculum & Examinations | 19.9 (3.4) | 20.5 (3.7) | 20.0 (4.4) | 19.4 (3.9) | 20.8 (4.0) | 20.6 (4.1) | 21.5 (4.3) | 20.1 (4.2) | 21.8 (4.4) | 16.4 (3.6) | NA | NA |
| Coordination and Control through Ongoing Evaluation | -.3 (1.7) | .3 (1.6) | 0 (1.9) | -.3 (1.9) | .6 (1.7) | 1.1 (1.4) | .3 (1.5) | .5 (1.5) | .3 (1.7) | 2.8 (5.0) | NA | NA |
| Teacher Morale (Overall Job Satisfaction) | 56.4 (12.4) | 58.2 (9.2) | 56.1 (10.7) | 54.1 (13.0) | 62.4 (10.3) | 64.3 (11.8) | 60.6 (11.3) | 64.1 (7.9) | 68.4 (9.1) | 62.8 (9.1) | NA | NA |
| Job Satisfaction Subscales: | | | | | | | | | | | | |
| Professional Support in Schools | 22.5 (6.0) | 25.0 (4.3) | 23.5 (6.0) | 21.3 (5.6) | 25.4 (4.7) | 27.2 (5.0) | 23.9 (5.6) | 24.1 (4.5) | 26.9 (4.9) | 29.1 (4.3) | NA | NA |
| Assignment (Courses & Students) | 10.4 (2.6) | 9.9 (2.1) | 11.2 (2.1) | 10.2 (2.4) | 10.8 (2.7) | 10.8 (2.8) | 11.1 (2.6) | 12.1 (1.6) | 12.3 (2.1) | 11.3 (2.3) | NA | NA |
| Time Demand of Job | 3.4 (1.7) | 3.7 (1.6) | 3.9 (1.5) | 4.1 (1.3) | 3.7 (1.6) | 3.3 (1.7) | 3.4 (1.5) | 3.3 (1.4) | 4.9 (1.4) | 3.9 (1.7) | NA | NA |
| Economic and Social Status | 12.3 (3.0) | 11.3 (3.2) | 9.2 (3.5) | 11.2 (4.1) | 12.9 (3.4) | 13.2 (3.8) | 12.6 (3.8) | 12.9 (2.8) | 13.5 (2.9) | 10.8 (3.8) | NA | NA |
| Parent Support | 3.8 (1.6) | 4.1 (1.4) | 3.7 (1.5) | 3.4 (1.6) | 4.8 (1.1) | 4.7 (1.2) | 4.7 (1.4) | 5.1 (1.2) | 5.4 (1.4) | 4.4 (1.2) | NA | NA |

| | CRC SURVEY, 1989: MICHIGAN SITES | | | | | | NATIONAL SURVEY (ATS), 1984 | |
|---|----------------------------------|----------------|----------------|---------------|----------------|---------------|--------------------------------|-------|
| | 11 | 12 | 13 | 15 | 16 | 14 | PUBLIC SCHOOLS mean (s.d.) | |
| I. SCHOOL CHARACTERISTICS | | | | | | | | |
| Size (9 - 12 enrollment) S < 885, M 885 - 1500, L 1501 - 2075, L+ > 2075 | L | L+ | L | M | S | S | 1289 ^a | (789) |
| Grade Structure | 9-12 | 9-12 | 7-12 | 9-12 | 9-12 | 9-12 | | |
| Magnet (x = yes) | | X | X | | | | | |
| Minority % L < 10%, M 10-29%, H 30-55%, H+ > 55% | L | H+ | H | H | H | M | 25% ^a | (30) |
| Student Achievement Rating (1990 Survey) (Teacher Average) (1 = highest; 5 = lowest) | 2.2 | 3.6 | 3.1 | NA | NA | 4.1 | 3.2 | (.7) |
| II. SURVEY RESPONDENTS | | | | | | | | |
| N 1990 | 59 | 57 | 42 | 53 | 48 | 9 | | |
| Teacher Response Rate (%) | 63% | 63% | 55% | 88% | 89% | 100% | | |
| III. SCHOOL CLIMATE^b | | | | | | | | |
| Principal Leadership | | | | | | | | |
| 1989 | 54.4 (9.1) | 48.6 (12.1) | 53.5 (12.9) | NA | NA | 65.0 (7.9) | | |
| 1990 | 50.9 (10.1) | 46.2 (13.3) | 54.0 (11.0) | 58.1 (9.2) | 51.1 (13.1) | 73.2 (5.2) | 50.6 | (6.7) |

^a The means and standard deviations are based on unweighted ATS data.

^b For each index, the mean of teacher ratings within the school is reported; the standard deviation of teacher ratings is shown in parentheses. See Appendix 1 for questionnaire items used to construct each index and point range of the scale.

| | CRC SURVEY, 1989: MICHIGAN SITES | | | | | | NATIONAL SURVEY (ATS), 1984 | |
|--------------------------------------|----------------------------------|---------------|---------------|---------------|---------------|---------------|--------------------------------|-------|
| | 11 | 12 | 13 | 15 | 16 | 14 | PUBLIC SCHOOLS mean (s.d.) | |
| III. SCHOOL CLIMATE (cont.) | | | | | | | | |
| Collegiality Index | | | | | | | | |
| 1989 | 19.8 (4.1) | 19.6 (4.2) | 17.1 (4.4) | NA | NA | 25.9 (5.6) | 19.2 | (2.3) |
| 1990 | 19.4 (3.3) | 18.4 (4.4) | 15.7 (4.1) | 19.4 (4.3) | 19.4 (3.8) | 27.7 (2.4) | | |
| Teacher Influence over School Policy | | | | | | | | |
| 1989 | 11.4 (2.7) | 9.6 (2.8) | 11.3 (3.5) | NA | NA | 13.0 (2.1) | 10.1 | (1.5) |
| 1990 | 11.3 (2.6) | 9.0 (3.2) | 10.5 (3.1) | 9.7 (2.9) | 9.9 (3.0) | 15.4 (1.4) | | |
| Control over Classroom Instruction | | | | | | | | |
| 1989 | 21.1 (1.9) | 19.4 (3.3) | 19.3 (3.5) | NA | NA | 20.9 (3.3) | 21.1 | (1.2) |
| 1990 | 20.4 (2.3) | 19.4 (3.0) | 19.5 (3.1) | 18.9 (3.4) | 18.9 (3.2) | 22.4 (2.4) | | |
| Goal Consensus Index | | | | | | | | |
| 1989 | 8.4 (1.8) | 8.4 (1.9) | 7.6 (2.2) | NA | NA | 8.7 (2.1) | 8.0 | (.9) |
| 1990 | 8.3 (1.5) | 8.0 (1.9) | 7.4 (1.8) | 8.6 (1.6) | 8.2 (1.9) | 10.4 (1.6) | | |
| Department Identification | | | | | | | | |
| 1989 | 8.0 (2.6) | 9.0 (2.4) | 7.6 (2.7) | NA | NA | 4.6 (4.2) | NA | NA |
| 1990 | 8.4 (2.5) | 9.5 (2.7) | 7.4 (2.7) | 7.2 (2.6) | 6.9 (2.4) | 4.5 (1.8) | | |

| | | CRC SURVEY, 1989: MICHIGAN SITES | | | | | | NATIONAL SURVEY (ATS), 1984 | |
|------|---|----------------------------------|---------------|---------------|---------------|---------------|---------------|--------------------------------|--------|
| | | 11 | 12 | 13 | 15 | 16 | 14 | PUBLIC SCHOOLS | |
| | | | | | | | | mean | (s.d.) |
| III. | SCHOOL CLIMATE (cont.) | | | | | | | | |
| | Job Satisfaction | | | | | | | | |
| | 1989 | 7.8 (1.5) | 7.1 (1.8) | 7.1 (1.6) | NA | NA | 8.7 (.8) | 7.3 | (.6) |
| | 1990 | 7.2 (1.7) | 6.9 (1.6) | 7.2 (1.5) | 7.5 (1.5) | 7.0 (1.3) | 9.1 (.8) | | |
| IV. | TEACHER-STUDENT RELATIONS | | | | | | | | |
| | Personalization | | | | | | | | |
| | 1989 | 8.3 (1.7) | 8.2 (1.9) | 8.0 (1.9) | NA | NA | 11.3 (.8) | NA | NA |
| | 1990 | 8.2 (1.8) | 8.7 (2.6) | 8.5 (1.8) | 8.9 (2.0) | 8.7 (2.0) | 11.4 (1.1) | | |
| | Teacher Efficacy | | | | | | | | |
| | 1989 | 26.0 (5.3) | 25.5 (5.9) | 25.8 (4.0) | NA | NA | 28.4 (3.2) | NA | NA |
| | 1990 | 24.9 (5.6) | 25.3 (6.2) | 26.1 (5.5) | 25.5 (4.7) | 25.2 (3.9) | 30.2 (4.4) | | |
| V. | PROFESSIONAL COMMUNITY (New Indices) | | | | | | | | |
| | Job Variety | 16.8 (3.4) | 15.9 (3.7) | 16.1 (3.5) | 16.9 (3.5) | 16.6 (3.1) | 22.1 (2.5) | NA | NA |
| | Teacher Learning | 14.0 (2.7) | 14.7 (3.3) | 14.1 (2.9) | 14.8 (3.1) | 14.6 (2.5) | 15.4 (2.7) | NA | NA |
| | Professional Development Opportunities Taken | 32.9 (6.5) | 31.9 (8.2) | 30.5 (6.9) | 33.5 (6.4) | 32.9 (6.4) | 38.4 (8.3) | NA | NA |

| | CRC SURVEY, 1989: MICHIGAN SITES | | | | | | NATIONAL SURVEY (ATS), 1984 | |
|--|----------------------------------|----------------|----------------|---------------|---------------|---------------|--------------------------------|----|
| | 11 | 12 | 13 | 15 | 16 | 14 | PUBLIC SCHOOLS mean (s.d.) | |
| V. PROFESSIONAL COMMUNITY (cont.) | | | | | | | | |
| Standardization through Curriculum & Examinations | 20.3 (2.8) | 19.9 (3.8) | 17.9 (4.2) | 20.1 (4.1) | 18.7 (3.8) | 18.0 (2.9) | NA | NA |
| Coordination and Control through Ongoing Evaluation | -7 (1.3) | -1.3 (1.6) | -6 (2.1) | .1 (1.5) | -4 (1.7) | 1.4 (1.2) | NA | NA |
| Teacher Morale (Overall Job Satisfaction) | 57.9 (9.7) | 56.3 (12.2) | 56.4 (10.6) | 59.3 (8.4) | 55.6 (9.6) | 75.2 (5.5) | NA | NA |
| Job Satisfaction Subscales: | | | | | | | | |
| Professional Support In Schools | 23.1 (4.5) | 20.8 (5.6) | 20.6 (5.1) | 23.9 (4.4) | 22.6 (4.5) | 32.1 (1.6) | NA | NA |
| Assignment (Courses & Students) | 9.6 (2.8) | 9.5 (3.0) | 9.7 (2.7) | 9.7 (2.8) | 10.2 (2.4) | 12.9 (1.5) | NA | NA |
| Time Demand of Job | 3.8 (1.4) | 4.5 (1.5) | 3.7 (1.5) | 4.3 (1.1) | 3.9 (1.4) | 5.3 (1.2) | NA | NA |
| Economic and Social Status | 12.6 (3.0) | 13.8 (3.8) | 13.8 (3.1) | 12.6 (3.0) | 12.2 (3.1) | 15.8 (2.6) | NA | NA |
| Parent Support | 4.1 (1.3) | 3.7 (1.7) | 4.1 (1.3) | 3.9 (1.3) | 3.3 (1.4) | 4.4 (1.4) | NA | NA |